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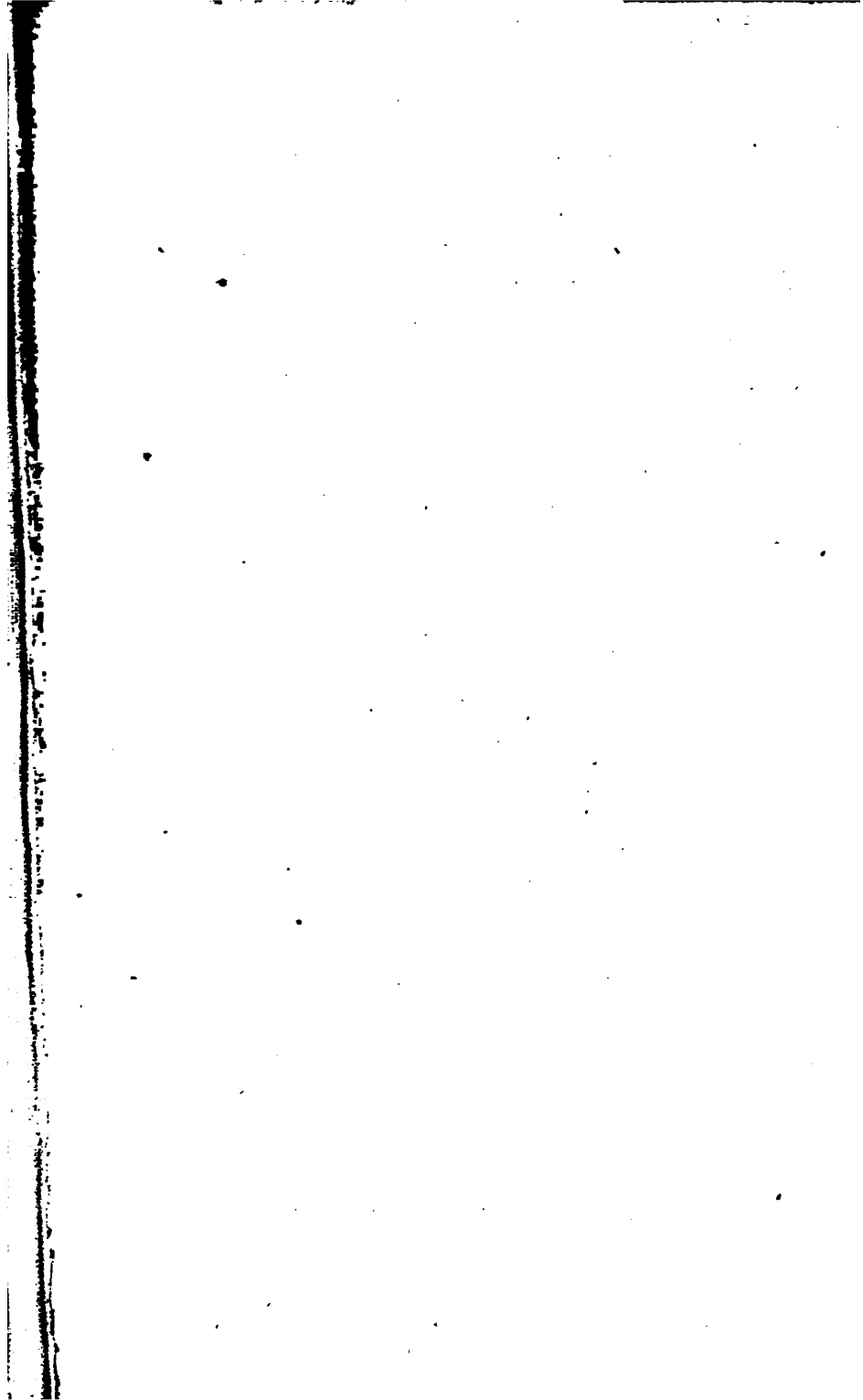
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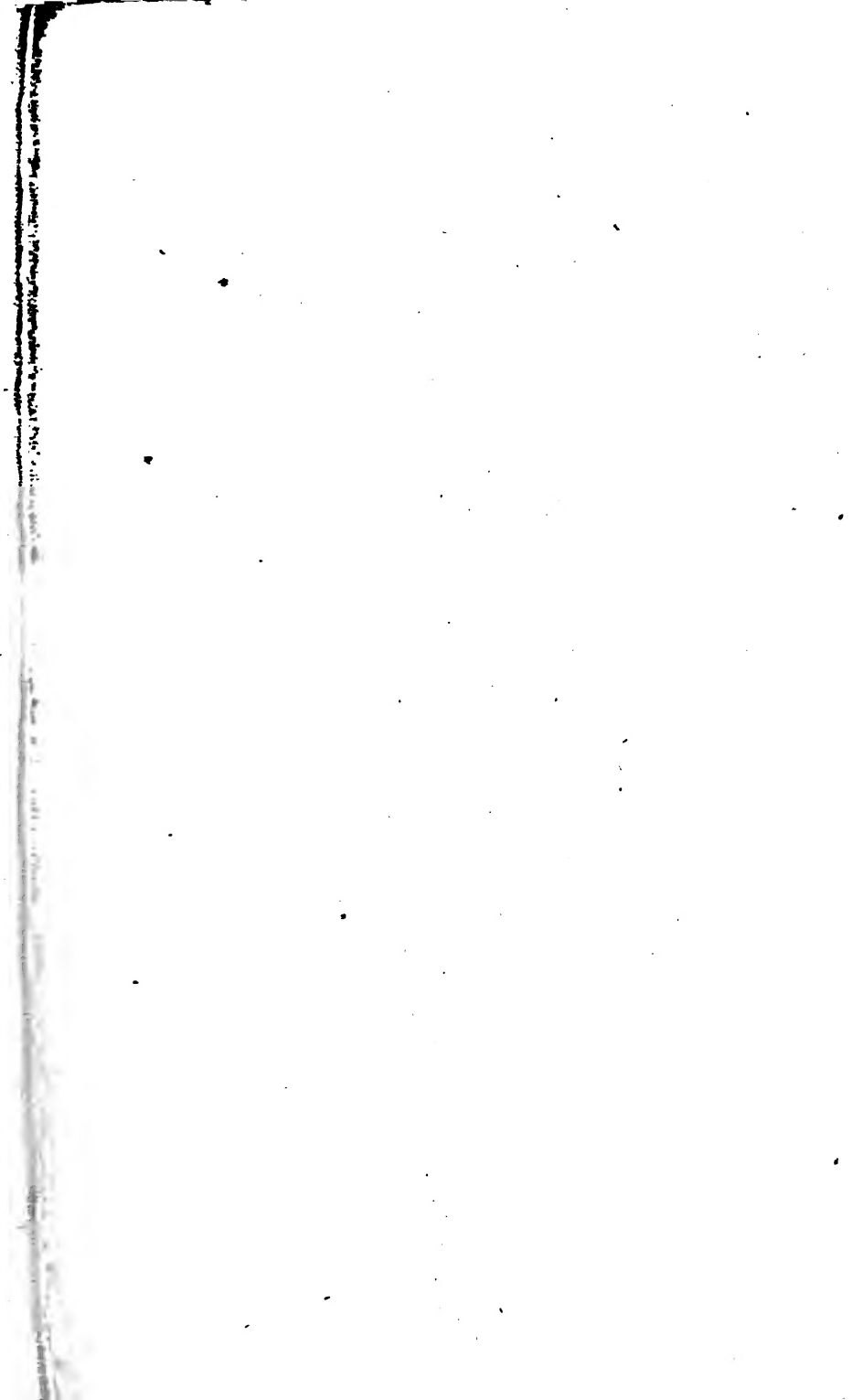
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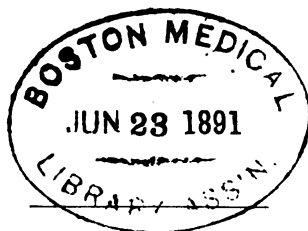
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THE
JOURNAL
OF
The British Dental Association.

▲
MONTHLY REVIEW OF DENTAL SURGERY.



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Members are reminded that their subscriptions are due in JANUARY, and are requested either to remit them direct to the Treasurer, at 40, Leicester Square, or if more convenient, to pay them through their bankers, or through the agency of one of the Dental Depots, and so save unnecessary postage, &c., in applying for the same.

SPECIAL NOTICE.—All communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

NOTICE.—The new LIST OF MEMBERS is in Preparation.

THE JOURNAL
OF THE
BRITISH DENTAL ASSOCIATION
A
MONTHLY REVIEW OF DENTAL SURGERY.

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VOL. IX.

Registration.

ONE of the obvious advantages of civilisation is the facility which it affords for obtaining reliable information about an individual with whom we have, or are about to have, business relations.

If a patient asks of us a question as to the status of some practitioner whom we do not personally know, we turn at once to the Dentists' Register and seek the needed information there—and if we find him to be an L.D.S. we can, if need be, get additional particulars in the Medical Directory. In such an event, which is of every-day occurrence, the absence of a name which has the right to be there will operate greatly to the disadvantage of its possessor, who will be

liable to be set down in the mind of the inquirer as an unqualified practitioner. On purely selfish grounds, therefore, there is strong inducement for the individual to take care that he is duly inscribed upon the Register, and the younger he is, and the less well known, the greater the necessity.

It is but a few years since that the possession of a legalised Dentists' Register was considered utopian and beyond the reach of our most ambitious reformers, and yet in the first decade of its existence it is being largely neglected by many of those who, being only at the commencement of their career, are most likely to profit by its future operation.

As a Register is in its nature continually incomplete, and the errors of to-day may be corrected on the morrow while that which is to-day correct may in like manner become incorrect, it is obviously impossible to make a definite statement regarding the number of defaulters in our ranks, but we feel justified in saying that there are at present nearly 120 reputable members of our profession who have either neglected to place their names on the Dentists' Register, or who, being already registered, have failed to register their qualification, after having passed the examination before one of the appointed examining boards. The last class forms about one-half of the number named, and considering that the trouble of registration is but small, and in their case the expense but nominal, we can only account for this on the hypothesis that the matter being easy and simple it is neglected.

Regarding the first class of defaulters, those who practise without registration on the strength of having a diploma, it has been urged in mitigation of their conduct that the charge for registration is a heavy one, and coming as it does at the end of an expensive education, it looks like

an additional expense which may be, for a time at least, conveniently avoided. The unsoundness of this position may be pointed out in many ways. To begin with, the system of education followed out by the student in his chosen profession is made what it is—*i.e.* compulsory and of social value—by registration. So far then as the unregistered man participates in these benefits, he is doing so at the expense of his more public spirited neighbours, without contributing his quota to the work, and this is surely an undignified and unworthy position to occupy. His evidence as an expert in a court of law and his power to recover for professional services are both invalidated, and he is still open to jury and to other public work from which a registered man is legally excepted. Further, we would point out that although the sum appears large, it is final, and in this aspect is in marked distinction from that of other professions whose members have to pay a large annual fine while they continue in practice.

We may take it as a significant, and perhaps hopeful, fact, that at a much later period in the history of the medical Register the same difficulty arose as that which is now confronting us, and a special notice similar to that which we publish in another page, had to be issued by the registrar for distribution by the licensing bodies on the occasion of the pass examinations of the student. The address of Mr. Canton at the opening meeting of the Students' Society this season merits the attention of all non-registered practitioners, and we hope that all the London passed men will remember the words of the President of the dental board, "that the final act of their educational course is that of registration, and that until this is done they are not legally qualified practitioners." As a certain remedy for this trouble of non-registration, it has been suggested to us that the registration fee should be

added to the fee for the diploma, and transmitted to the registrar by the licensing body. This would certainly be a most efficacious remedy, provided that it could be carried out without undue friction.

The retention of the names of deceased practitioners is a grievous source of error in our Register, and as has been recently pointed out by Mr. Waite, exists to a degree hitherto unsuspected. In the year 1885 communication was made to the English Registrar-General on the subject, but the attempt to interfere with the calm current of official routine was not immediately successful. Last year several copies of certificates, duplicates of which had not been sent to the medical registrar, were procured by Mr. Waite and by Mr. Bowman Macleod, and forwarded as proofs of want of attention to the provisions of the Dentists Act by the local registrars. This second effort was apparently not more successful than the first, and the registration office still maintained its administrative infallibility, but another letter brought about the symptoms of a thaw in the official reserve, and at present the medical registrar is following the matter up with every prospect of a satisfactory result. The Scotch and Irish officials proved much more amenable to reason, and at once recognised the justice of our complaint, and issued special notices, pointing out the provisions of the Dentists Act, and the duty of local registrars.

It is to be hoped that by perseverance in such a course, this source of error will be removed, and the Register corrected through the legitimate channels rather than through voluntary and spasmodic efforts, which are apt to vary in utility according to the judgment and industry of the volunteers. Besides this, we should remember that a certificate sent by the local to the general medical registrar can be acted upon immediately, and the name of

the deceased forthwith removed from the Register. A statement made by a private individual must be verified by the registrar, and this may involve the lapse of several months before he could act upon it.

Another and perhaps more extensive crop of errors arises from a different source. In the opposition to the Dentists Bill, when before Parliament, it was continually reiterated that the promoters of the Bill intended to prevent chemists and druggists from following their established practice of relieving pain by extracting teeth, and hence in the first rush for registration, a large number of persons registered under the pharmacy clause, rather with the view of assuring themselves of their position, than with an intention to follow the practice of dental surgery in all its branches. The majority of these gentlemen never appropriated the description of dentist, and hence on the decease of any one of them, he is returned to the local registrar as a chemist and druggist, the representatives being unaware of the registration of the title dentist, or else regarding it as not requiring any attention.

This is a source of error only to be overcome by every member of the British Dental Association noting the decease of a chemist and druggist which may come within his observation, and sending to the secretary of the branch of his district the correct name, surname and address of the deceased. The local secretary is provided with a copy of the Chemists' and Druggists' Register, and so is able to see if the deceased is on the Dentists' Register, and to take steps for the removal of his name. The process will certainly be intricate and prolonged, but surely better than allowing errors to perpetuate themselves. When we cannot do all we want, the next best thing is to do all we can.

In this same class of difficulties we may rank the ob-

curity arising from the peculiar action of the Medical Council in admitting to the Dentists' Register many persons who had not even a claim to be on the Pharmaceutical Register. We have no means of tracing the existence or non-existence of such persons, but the efforts of the medical registrar will, we trust, very much reduce, and ultimately eradicate, this evil. During the past year between 5,000 and 6,000 letters were sent out from the office of the Medical Council in order to rectify the Dentists' Register, and no less than 1,000 of these had to be followed by registered letters, and these last, if not answered within a period of three months, will entail the removal of the names of the persons to whom they were sent from the official list of dentists.

Important Notice.

1. *The attention of every dental practitioner who has obtained a registrable qualification from any medical authority in the United Kingdom is called to the importance of immediately registering his name and qualifications in the Dentists' Register.*

2. *On registration he should be careful to obtain (and thereafter preserve) a certificate of such registration, signed by the Registrar, countersigned by the chief clerk, and stamped with the Council's official stamp.*

3. "By the *Dentists Act* (1878), as modified by Section 26 of the *Medical Act* (1886), it is provided

"(a) From and after the first day of August one thousand eight hundred and seventy-nine, a person shall not be entitled to take or use the name or title of 'Dentist' (either alone or in combination with any other word or words), or of 'Dental Practitioner,' or any name, title, addition, or description implying that he is registered under this Act or that he is a person specially qualified to practise dentistry, unless he is registered under this Act. The words 'Title, Addition, or Description,' include any title, addition to a name, designation or description, whether expressed in words or by letters, or partly in one way and partly in the other.

"(b) Any person who, after the first day of August one thousand eight hundred and seventy nine, not being registered under this Act, takes or uses any such name, title, addition, or description as aforesaid, shall be liable, on summary conviction, to a fine not exceeding twenty pounds; provided that nothing in this section shall apply to legally qualified medical practitioners.

"(c) A person registered under this Act shall be entitled to practise dentistry and dental surgery in any part of Her Majesty's dominions, subject to any local law in force in that part, and from and after the first day of August one thousand eight hundred and seventy-nine a person shall not be entitled to recover any fee or charge, in any court, for the performance of any dental operation or for any dental attendance or advice, unless he is registered under this Act or is a legally qualified medical practitioner.

"(d) If a person takes or uses the designation of any qualification or certificate in relation to dentistry or dental surgery which he does not possess, he shall be liable, on summary conviction on such prosecution as hereinafter mentioned, to a fine not exceeding twenty pounds.

"(e) A prosecution for any of the offences above in this Act mentioned may be instituted by the General Council, by a Branch Council, or by a medical authority, if such council or authority think fit, or by a private person."

4. REGISTRAR, AND OFFICE FOR REGISTRATION.

W. J. C. MILLER, B.A., Registrar	} Medical Council Office, 299, Oxford Street, London, W.
of the General Council and of the Branch Council for England	

5. REGISTRATION-FEES.

(a)	For original registration	...	...	...	£5	0	0
(b)	For each additional qualification	...	...	...	0	5	0
(c)	For restoration to the <i>Dentists' Register</i>						
	under Section 12 of the <i>Dentists Act</i>						
	(1878)	...	...	...	...	0	5
		...	...	...	...	0	5

ASSOCIATION INTELLIGENCE.

Irish Branch.

A COUNCIL meeting was held in the Royal College of Surgeons in Ireland, Dublin, on December 10th, 1887. Present: Daniel Corbett, M.R.C.S., president; Robert Moore, F.R.C.S.I., vice-president; Robert Hazelton, F.R.C.S.I., treasurer; W. Booth-Pearsall, F.R.C.S.I., secretary; A. W. W. Baker, M.D.; Daniel Corbett, junr., F.R.C.S.I.; John O'Duffy, L.D.S.I.; Charles Wall, L.D.S.I.; John McStay, L.D.S.E.; and W. H. Elwood. Mr. Theodore Stack, member of the Representative Board, attended by invitation.

The following letter was received by the Hon. Sec. :—

Royal College of Surgeons in Ireland, Dublin,

December 2nd, 1887.

To the Hon. Sec. Irish Branch of British Dental Association.

DEAR SIR,—I am directed by the President and Council, to inform you that in conformity with the request of Fellows of the College practising dentistry in Dublin, and as requested by your Association, they directed me as their Secretary, to proceed to London for the purpose of producing to the General Medical Council the documentary proofs of Mr. Partridge's violation of his undertaking with the College and its ordinances. I am also to inform you that the President and Council have since learned that thereupon the General Medical Council erased Mr. Partridge's name from the Dental Register under Clause 13 of the Act. I am to request that you will communicate these facts to the Executive of the British Dental Association.

I am, yours very truly,

A. H. JACOB, F.R.C.S.I.,

Secretary of Council.

The Hon. Sec. was directed to acknowledge the receipt of letter and to forward Dr. Jacob's letter to the Association in London.

The first meeting of the Irish Branch of the British Dental Association, took place on Saturday afternoon, December 10th, in Dublin, in the Albert Hall, of the Royal College of Surgeons in Ireland. The President of the branch, Daniel Corbett, M.R.C.S., L.D.S.Eng. (President-elect British Dental Association), having taken the Chair, delivered his address to the members as follows :—

On this the first meeting of the Irish branch of the British Dental Association, at which I have the honour to preside, it may naturally be expected of me that I should address some suitable observations to my professional brethren; before I do so, I must, however, express my gratitude to the members of the British Dental Association, for the distinguished position to which they have elected me. Gentlemen, I feel, I confess, proud of my present title as your President, but, when I look within, the consciousness of my own deficiency overcomes my pride, and suggests other reasons than personal deserts for the honour you have so undeservedly conferred upon me. Bear with me if I should be a little egotistical in my remarks, and accept as my plea the consciousness that the period of my professional activity must soon cease, and my anxiety is to leave to those who will succeed me a professional character worthy of imitation.

Gentlemen, the labour and duties we have undertaken as members of the British Dental Association, are by no means light and insignificant, therefore we must individually, and conjointly with the Parent Association, exercise all our influence and compel those outside members of the profession to adopt that reform to which, from a conscientious acknowledgment of what the public expects, the educated and honest practitioner of the present day adheres.

Gentlemen, our noble profession, as I will designate it, is at times degraded by the ostentatious display of advertisements, calculated to attract the ignorant and afford an opportunity for imposition on the credulous visitor to the charlatan; to defeat this practice, and make it harmless, as regards our own interest, we must labour, and how? I will answer, by the free and constant interchange of our ideas with each other, a diligent searching after scientific knowledge, a willingness on our part to place at the disposal of our professional brethren that information which tried experience has proved to us to be beneficial to the public. Thus will we defeat the action of those unprincipled parties who regard their own immediate gain as the first object of their existence.

I know of no profession or calling, which in the last half century has made such wonderful progress, both surgically and mechanically, as that of the dentist, with which must ever be associated the names of Tomes, Saunders, and the leading magnates of the Odontological Society of England. And I see no reason why we

should not claim from the public an equal recognition of respect with the other branches of the healing art.

Gentlemen, we must not rest satisfied with our present state of advancement ; we must still further labour in the pursuit of knowledge, not alone that of a special character as relating to our calling, but also of a versatile nature, the acquisition of which will enable you to be more entertaining to your visitor when occupied with a tedious operation.

There is no profession save that of the dentist, in the conduct of which so many opportunities arise, where the cultivated mind can exhibit its attractions and prove the combination of the *suaviter in modo* with the *fortiter in re* as essentially necessary, towards professional popularity. We must not arrogate to ourselves a superior intelligence, or a greater amount of information, than may be at the command of other members of the profession, but we can always influence public favour by a refined and graceful recognition, of what is expected of the professional man, when called upon, to render relief or assistance to the sufferer. This becomes an easy matter to the man of cultivated mind, and, hence, I do not think I can be too impressive in recommending its adoption.

And now about our treatment of the needy and the poor, who must require our services. I find it difficult to avoid some political allusion at this moment, when the state of our unhappy country has so sadly altered the condition of the upper and middle classes of society, from whence our incomes are derived. We, as professional men must not withhold our services when required, though the immediate recompense be not forthcoming, let us remember the time when things were bright with them, they gave freely. Give them not a reason to say with the poet—

Deserted at his utmost need by those his former bounty fed,
On the cold earth exposed he lies, without a friend to close his eyes.

The sympathy between the eyes and teeth suggests the quotation. One matter I would insist upon, namely, under no circumstances should we substitute inferior work for what we conscientiously believe should be supplied, and thus will we prove to the public that their interests and safety are best guaranteed by a visit to the honest and accomplished practitioner.

I see around me young practitioners—to them I would more particularly address my concluding observation, when urging them

forward in the pursuit of refined knowledge ; in the language of a well-known author I will say, "seek greedily that knowledge which will comfort you, adorn you, and never quit you, which will open to you the kingdom of thought and all the boundless regions of conception, as an asylum against the cruelty, the injustice and the pain, that may be your lot in the outer world ; that which will make your motives habitually great and honourable, and light up in an instant a thousand noble disdains at the very thought of meanness and of fraud."

Mr. BOOTH-PEARSALL then read his paper

On Improvement of the Voice in Cases of Congenital Cleft Palate by Mechanical Aid.

ABOUT four years ago, the case I have the honour of bringing before the Irish Branch of the British Dental Association, was sent to me by Mr. Wheeler, with a note, asking my assistance in making articulate speech possible in this congenital case of fissured palate. Mr. Wheeler had previously operated upon him with a view of closing the passage between the mouth and the nose, and succeeded in joining the severed edges of the soft palate and uvula, but was unable from want of material to bridge across the fissure in the hard palate. As most of my dental brethren are aware, there has been for many years a great difference of opinion between operators and surgical writers as to the procedure to be adopted in congenital adult cases, and it is very rare to find in the numerous cases that have been operated upon that the intonation and articulation of these cases have been benefited.

I have carefully examined and studied a number of cases of wonderfully successful surgical restoration of soft palates and bridging across the deep fissure in the hard palate, but I have invariably noticed that the speaking voice of these congenital cases was far from perfect in clearness of tone and distinctness of enunciation.

It is not necessary to dwell upon the work that has been done for the benefit of patients suffering from this sad deformity, from Ambrose Paré, who first described his method of making an obturator in his work, published in 1541, down to the more scientific work done by Dr. Norman Kingsley, of New York, and others in our own time, and I think I will best occupy the time of the meeting by directing your attention to the practical details

to be observed in dealing with similar cases to the one I shall exhibit.

You will observe in the model of the case I have prepared for your examination that the case was originally complicated with a hare lip, the fissure extending from the ala of the nose to the uvula. The hare lip was operated upon in early life, and when the patient came under my care his soft palate had been skilfully joined by Mr. Wheeler. You will at once be struck by the changed character of the hard palate from that of the normal type by the congenital defect in union, and I endeavoured, to so far restore the shape of the normal palate as the position of the patient's teeth would permit, at the same time the vulcanite plate or obturator was prolonged as you see it in this cast, so as to bring into play the muscular action of the soft palate and the superior constrictor of the palate. Nothing is more useless to patients suffering from this congenital defect in the soft palate than the tense drum-like vela left by the surgical aid so frequently practiced in bringing about union of the fissured soft palate, the newly formed velum, or septum, is rigid, tense and deficient in length, and as in the majority of cases it cannot possibly be brought into firm contact with the pharyngeal wall, imperfect speech must follow this defect.

When I first took charge of my patient, this tense and rigid condition of the soft palate made me almost despair of any mechanical success, but I found by carefully polishing the upper surface of the obturator, so as to allow the palate and back of the throat to touch, or rather grasp the curved and dome-shaped ending I have placed at the end of the obturator, the muscles of the palate and the superior constrictor of the pharynx become in time trained to do the work they are intended to do.

The chief merit in the congenital case before you is successful creation of articulate speech by the aid of a rigid obturator, and my hearers will remember that Dr. Norman Kingsley considers that in congenital defects, articulation can more easily and certainly be restored with an elastic velum scientifically adjusted, than with any other form of apparatus.

The want of endurance to wear as well as the solvent action of the secretions of the nose and mouth, renders the successful application of soft rubber somewhat uncertain, to say nothing of the laborious preparation of the metal moulds in which to vulcanize the soft rubber so that no irritating edges may be left to

cause discomfort to the soft parts in contact with the artificial vela. Yet, in my opinion, although the progress of the patient in acquiring articulate speech may be slower with an obturator made with hard rubber, the advantage in cleanliness, in simplicity of construction, permanence of wear and cheapness of production, far outweighs the value of soft rubber, and Dr. Norman Kingsley recommends the adoption of hard rubber after the soft rubber vela, has been worn sufficiently long to educate the muscles of the palate and throat into suitable action.

In attempting to restore or rather create the function of articulation in a patient like this, many circumstances have to be considered; as each cure must be neutral with reference to its own particular needs, and the fact that their patients have never learned to produce the voice in a natural way, adds to the difficulty of obtaining success by mechanical or other aid. The voice escapes uncontrolled and unmodulated through the fissure from the mouth into the nose, and the power of shutting off the escape of the sound into the nose giving the sharpness and clearness of normal voice, is largely controlled by the action of the superior constrictor of the pharynx, which contracts itself during the utterance of every letter pronounced without a nasal sound, just as the levator palati does, as we know from the observations of Dr. Wilhelm Suerson, in 1867.

The most important step to take in a similar case is to obtain as good a model as possible at the first sitting; having cast the impression, we should study the model to see how far the character and shape of an average palate can be restored, and a wax or gutta percha model of the proposed obturator should be tried in the mouth, prolonging and modelling the most dependent part of the obturator by degrees, till by close observation the perfect form has been obtained, so that the projected end of the obturator will permit of comfortable deglutition, as well as the muscular action of the upper part of the pharynx and the soft palate. It is well to lay stress upon this part of the process of restoration as your procedure must be guided by careful experiment, and in the course of a few months the spoon-like end of the obturator can be considerably increased without any discomfort to the wearer to the marked improvement of articulation. Having made your wax model it is flaked and vulcanised in the usual way, and both the upper and lower surface carefully polished. I have found it adds greatly to the comfort of the patient if a

couple of deep grooves are placed on the upper surface of the obturator leading towards the throat, affording a means of discharge for the mucus that forms in the nasal passages, so that in cleft palate work as well as in sanitary science the use of well considered drainage is beneficial.

The marked protection afforded to cases of cleft palate from the tendency to catch cold in slight variations of temperature is in itself worth the trouble of making an obturator, as these cases when left uncared for constantly suffer from the most obstinate and depressing colds in the head I have ever seen. I will now ask my patient to read without the obturator; the character of the voice, nasal, confused and indistinct at once attracts attention, and the absence of resonance or timbre, so marked in speakers, produces a quality of voice and flatness of tone we instinctively associate with that of patients suffering from cold in the head.

My patient will now read a passage with the aid of the obturator, and you will perceive that the absence of tone has vanished, and that each word rings distinctly in the head, vibrating in the nasal passages, giving the quality of distinctness we all so much value in the public speaker or orator. The resonant quality of the voice has been, I think, very successfully restored, and with the exception of the incurable defect of the slightly nasal twang, and the spasmodic action of the left nostril, few present would recognise him as a subject of a deformity so seriously affecting natural speech. These unhappy patients afford us a great opportunity for the exercise of patient and intelligent ingenuity, and I shall feel happy indeed if I have contributed even a little towards making the successful treatment of other sufferers possible by simple and inexpensive means.

My patient has come here to-day in a truly scientific spirit, in the hope that what has been accomplished by his intelligence, patience and perseverance to overcome the painful disadvantage of his congenital defect, may prove an encouragement to others in mastering such difficulties, as we all know such cases have to bear in daily life.

The following paper was then read by Mr. R. THEODORE STACK :—

On the Balkwill Tube.

He wished at the commencement to state that he was no bigot on the question of pivoting. He used different methods to suit different cases as far as he knew them.

He discussed the recent development of methods of pivoting, and claimed that apart from fad or fashion, which attended the rise and decline in many lines of treatment, the more accurate treatment of roots which had been gradually adopted in the last twenty years was the solid foundation on which the treatment by pivoting rested.

This enlightened treatment of roots began with the dawn of the antiseptic era. Having described in detail the steps of the operation, Mr. Stack proceeded to show several models where this treatment had been adopted with success, both in restoring pivot teeth which had become loose when pivoted by some other method, in placing two crowns on one root in the cure of alveolar abscess, &c.

Messrs. Ash, in London, state that the sale of the Balkwill tube has increased enormously in the last ten years.

As compared with the Richmond crown the slight mobility of the Balkwill was an advantage, as it rendered the latter less prone to break, and if the porcelain did break the repair was a matter of extreme simplicity. It was notorious that with the Richmond crown and bridge work in general, the porcelains were constantly breaking and here the repair was troublesome and difficult.

The pivot on wood and gold wire were most admirable operations where the root was good and the bite permitted this line of treatment, but Mr. Stack considered that it was not applicable to one quarter of the cases that would present themselves to the dentist for pivoting.

Having regard to the versatility of the operation, its adaptation to close bites, to decayed roots, to cases where two teeth could be put on one root, its usefulness in retrieving cases of failure by other methods, and the simplicity of its repair, Mr. Stack thought that dentist unwise who left it out of the catalogue of his therapeutic measures.

A short paper was then read by Mr. CHAS. WALL, L.D.S., R.C.S.I., on "Dentists, Dentistry and the Public," in which, after referring to the improvement which had taken place of late years, both in the status and ethics of the profession, he directed attention to the regulations made for the education of candidates by the different licensing bodies in Great Britain and Ireland. After remarking on their general similarity, he read the regulations of the Royal College of Surgeons in Ireland, as follows :—

ROYAL COLLEGE OF SURGEONS IN IRELAND.

Preliminary Examination, Registration, and Matriculation.

The regulations of the College which refer to the Preliminary Examination of the candidates for the Letters Testimonial (which see) shall apply to the candidates for the Dental Licence.

Every candidate for the Licence in Dentistry shall be required to pass a Preliminary Examination and three Professional Examinations.

Professional Examinations.

The First and Second Professional Examinations shall be held in July and October in each year.

Should the Student fail to pass in July, he may present himself in October.

These examinations are, in all respects, identical with the Second and Third Professional Examinations for the Letters Testimonial under the New Scheme (which see), are conducted at the same time, and are subject to the same regulations.

Third and Final Professional Examination.

The Third Professional Examination shall be held in April, July, and October. The candidate shall be required, before admission to the Final Examination, to produce evidence—

a. Of having passed the Second Professional Examination ;
Or of having obtained a diploma in Surgery recognised by the College.

b. Of having attended, subsequent to registration by the General Medical Council, the following courses of Lectures recognised by the College :—

Dental Surgery and Pathology	} of each Two Courses.
Dental Mechanics	
Dental Anatomy and Physiology	} One Course.
Dental Metallurgy	

c. Of having attended for two years the practice of a Dental Hospital recognised by the College.

d. Of having been engaged in acquiring a practical knowledge of Mechanical Dentistry for at least two years, in a public Laboratory recognised by the College ; or for at least three years under the instruction of a registered Dentist. The candidate shall also submit a piece of mechanical work certified to be of his own making.

The candidate holding a diploma in Surgery recognised by the

College shall be required to produce certificates of one course of each of the above special Dental subjects, and of half the Hospital attendance, and half the Laboratory work required from other Dental students.

As this remission has been made on the understanding that the Qualified Surgeon shall devote his whole time to the Dental work, the special Dental courses, Hospital attendances, and Laboratory work required from him, must all be taken out after the date of his diploma in Surgery.

The Hon. Secretary shewed some samples of plaster of Paris manufactured by the Vale of Belvoir Plaster Company, Newark-on-Trent, and recommended the use in vulcanite work of the quality known as Italian fine, which, if allowed to set over night in the flasks, would produce wonderfully fine undercuts and sharp details. The samples were greatly admired for the hardness, fineness of texture and freedom from lumps, as well as sharpness of crystalline fracture.

Mr. A. J. Watts exhibited and described "An Indestructible Flask for Vulcanite Work," invented by himself, and which was in constant use in Mr. Pearsall's workroom. This flask differs in several particulars from those ordinarily in use, being thicker and having the cover united to the upper piece. The most important change in form, however, consists in "the guides," which are so arranged that the flask, instead of closing vertically, moves in an oblique direction from behind forwards, or from one side to the other. The advantage of this in the case of "undercuts" is, of course, apparent. Accompanying the flask is a new clamp, which somewhat resembles the press commonly used for closing.

Mr. WALL exhibited and explained a new form of tooth brush.

The various papers and exhibitors were listened to with great attention, and the President, Dr. Stack, Dr. A. W. Baker, Mr. Cameron Rogers, Mr. Andrew (Belfast), and Mr. Wall took an active part in the discussions.

Mr. FRANCIS McCLEAN proposed, and Mr. CHARLES WALL seconded the following resolution, which was adopted unanimously:—"That the Irish Branch of the British Dental Association tender their hearty thanks to the Royal College of Surgeons in Ireland for upholding the honour of the dental profession in their recent prompt action in the Partridge case."

Mr. R. H. MOORE proposed, Mr. W. H. ELWOOD (Belfast), seconded, "That the marked thanks of the Irish Branch of the

British Dental Association, be given to the President and Council of this College, for their courtesy in affording the members of the branch an opportunity of meeting." The resolution was unanimously adopted.

Mr. CAMERON ROGERS (Wexford) proposed, and Mr. J. J. ANDREW (Belfast), seconded "That the officers and Council of the Irish Branch form the central committee, to organise the annual meeting of the Association in August next." The resolution having been put from the Chair was unanimously adopted, and the proceedings terminated with a vote of thanks to the President.

In the evening, the members of the branch held a *Conversazione* in the annual exhibition of the Dublin Art Club, by the kind permission of the committee, and a large attendance of the members of the medical profession in Dublin rewarded the labours of those who had to carry out the details of this interesting *réunion*, the first of the kind ever held in Ireland.

Midland Branch.

AN informal meeting of members of this branch, and of members of the British Dental Association in the district, will be held in Leeds, on Saturday, February 4th, commencing at six o'clock.

The President of the Central Counties Branch, W. E. Harding, Esq., has kindly consented to give an account of his recent visit to the International Medical Congress at Washington.

Afterwards the meeting will be open for the introduction of topics which members may desire to discuss. Full particulars will be furnished by circular. Forms of application for membership, can be obtained of W. H. Waite, Hon. Sec., 10, Oxford Street, Liverpool.

At a Council meeting of the Midland Branch, held in Manchester, December 17th, 1887, the following gentlemen were duly elected :—

To the British Dental Association and Midland Branch, viz. :—
R. Desmond Ashby, Bank Buildings, Harrogate; C. Albert Barstow, 15, James Street, Harrogate; Alfred J. Beard, Simla House, Victoria Avenue, Harrogate; J. Henderson Bulcock, Rock Villas, Clitheroe; Edwin Cowper, Grange Road, Darling-

ton; J. C. S. Harper, 50, New Bridge Street, Newcastle-on-Tyne; Arthur B. Harrison, 8, Jesmond Road, Newcastle-on-Tyne; John B. Kennedy, 3, Rawdon Villas, Scarborough; William E. Margetson, Roscoe House, Dewsbury; Arthur G. Rayner, 13, Sandringham Terrace, York; Arthur W. Thompson, 4, Horse Market, Darlington.

To the British Dental Association only:—Richard Ashby, Argyle Lodge, South Cliff, Scarborough; Albert E. Knowles, 4, Russell Street, Stockton-on-Tees; Charles R. Morley, 264, Oxford Road, Manchester; Henry Planck, 19, St. Ann Street, Manchester; Charles Rippon, 68, West Parade, Huddersfield; William Somerville-Woodiwis, 1, Tower Street, West Hartlepool.

To the Midland Branch:—E. Fothergill, 10, Eldon Square, Newcastle-on-Tyne; Charles Browne-Mason, 2, West Park Terrace, Scarborough; R. A. Turnbull, 1, Lovaine Road, Newcastle-on-Tyne; Maurice Dale Wood, Whitehall Place, Stockton-on-Tees.

Associate of Midland Branch:—Alfred Abel, Alexandra House, Princess Square, Harrogate.

THE next meeting of the Central Counties Branch will be held at 71, Newhall Street, Birmingham, on Thursday, January 26th, at 5.30 p.m.

ORIGINAL COMMUNICATIONS.

Cocaine.

By C. J. BOYD WALLIS.

Now that cocaine is becoming so generally employed in medicine and surgery, its great liability to undergo alteration, and the very marked dissimilarity of its preparation would appear to require a more precise definition of its characters than have yet appeared with authority, and that we have still something to learn concerning its physiological action is evidenced by the conflicting accounts we receive.

The large number present at the November meeting of the Odontological Society, who appeared anxious to take part in the very interesting discussion on cocaine which took place, led me to curtail the remarks which I then intended to make on the subject. I will, therefore, take this opportunity to enlarge upon my remarks, and give cases which may prove instructive, whilst they will show the dissimilarity of results that occasionally follow the administration of cocaine. The symptoms which sometimes

follow its injection for the extraction of teeth are a little puzzling. Whether these symptoms are at all times due to the drug, or to a derangement of the mental equilibrium arising from fear or shock, or to some idiosyncrasy of the patient it is, I think, sometimes difficult to say.

Of the cases referred to, No. 1, a lady, was sent to me by a medical friend for the removal of some troublesome roots. She was a very delicate, highly nervous woman, somewhat depressed by suffering and the anticipation of the operation, and to whom her medical attendant forbade the administration of any of the usual anæsthetics, but said that she might have cocaine. But for the opinion of the doctor, my patient was one to whom I should have hesitated to administer cocaine on my own responsibility, notwithstanding the fact that I have found patients of this temperament frequently support cocaine injection remarkably well. However, thinking this a good case in which to further test the effect of the *alkaloid* itself in combination with *ether*, I prepared a solution of 2 grains in 30 minims, and I believe I succeeded in injecting nearly the whole of this, at any rate the loss, if any, was minute; after an interval of six minutes I removed leisurely and successfully the troublesome roots, apparently without any pain, and my patient declared herself delighted with the effects of the cocaine and the result of the operation; and I have no hesitation in stating that she left my rooms distinctly better, mentally and physically, than when she entered. The ether and cocaine had answered admirably in this case, whereas with gas alone two administrations would have been necessary, and even then I feel sure I could not have accomplished so much with such satisfactory results.

CASE No. 2 was apparently less satisfactory. A gentleman about fifty years of age, robust, well-built, and apparently in perfect health, requested me to remove a broken down painful lower molar. He sat down in a manner that would have led one to suppose that he regarded the operation as a pleasing joke, but I had no sooner taken up the instrument than his manner changed, and he remarked—"I do not half like this business, can you give me a whiff of chloroform?" Briefly, I answered in the negative, and suggested cocaine, or gas, if he would call on the morrow. He decided upon cocaine and I injected a solution of one grain of the hydrochlorated in ten minims of water. The tooth was extracted, the patient rinsed his mouth and then left the chair to

go, when he immediately put his hand to his face and said "he felt very funny," and by his manner I concluded that he felt faint, but he afterwards informed me that he did not feel faint and could not explain to me how he felt. I asked him into another room and gave him a little brandy, he then sat motionless for some minutes looking vacantly before him, and resting his head upon his hand with his elbow on his knee, on my speaking to him he leant heavily back in the chair and appeared quite indifferent to every thing, so I administered three minims of nitrate of amyl. He shortly after gradually recovered his vivacity, and left about an hour after the operation, apparently as well as when he entered. Upon my asking him how he felt, he replied, "a great deal better than when I was sitting in that chair of yours," and he appeared surprised at my entertaining any anxiety on his account, and said, "I should not mind another dose of that, what do you call it—cocaine—the sensation was rather pleasant."

Now the symptoms here exhibited were at one time certainly calculated to make one feel a little anxious, yet the patient in no way exhibited any anxiety after the operation, and was quite unconscious of there having been any cause for anxiety on my part. Were these symptoms due to the previous dread of the operation—"sheer funk"—to the operation itself, or to the cocaine. Personally, I believe they were due to a combination of influences; but chiefly to the cocaine, for they quite coincided, so far as I can judge by the patient's subsequent remarks, with the feeling of apathetic content and complete indifference to matters around which I have myself experienced after a dose of cocaine by injection.

CASE No. 3 illustrates one of the troubles which may arise, and which, though harmless in itself, may give rise to more serious trouble with a nervous patient or operator. This patient being a great traveller and the wife of a distinguished traveller, was not one likely to be influenced by fear. Having a badly decayed lower wisdom to remove for this patient, and the mouth being partially closed by swelling of the surrounding tissues, I had great difficulty in injecting a solution of $1\frac{1}{2}$ grain of cocaine, yet had to do so at the special request of the patient who had had previous satisfactory experience with the salt. The result was that some of the solution escaped, and passed on to the tongue and into the throat; the tooth was satisfactorily removed, and after rinsing the mouth the patient suddenly and somewhat nervously exclaimed

that she could not swallow. I requested her to let me look in her mouth, and then told her to swallow. I saw by the muscular movements that she swallowed well enough, but she still persisted that she could not. I gave her some water to drink, which she swallowed with ease, and not until I asked her the pertinent question, where the water had gone to, if she had not swallowed it, did she appear to realise that she really could swallow, and her mind was at once at ease; the case was otherwise satisfactory, but I can quite imagine that had my patient been of a very nervous temperament, or had I displayed any nervous anxiety myself, the case might have ended less satisfactorily.

My individual experience (upon my own person) has been pretty considerable. I have injected some 30 grains of the various preparations of cocaine of various degrees of purity in various solutions into different parts of my own body, and I have taken as much as 5 grains of the hydrochlorate internally in one dose, and at times I have felt distinctly the better for it, in no case very much the worse, and only twice have I experienced any unpleasant consequences or anxiety, and these two unfavourable experiences arose, I think, from my being very much out of health at the time, and probably was a little more anxious than usual. However, in the one case a little brandy with ether soon had a beneficial effect, and in the other case nitrate of amyl had a like result.

Notwithstanding the fact that some of the preparations employed were old, had been purposely kept for some months, and were impure specimens of the drug, I would emphasize the importance of using only pure and fresh specimens of the drug for injection, and the syringe should be kept perfectly clean and disinfected after use.

A recent writer in one of the medical journals suggested that the re-crystallized products should alone be used for injection, as they gave better results than the ordinary preparations. I believe I am correct in stating that the majority of those who have employed cocaine during the past year or two, have employed cocaine in its re-crystallized form as thus it is supplied by the dealers, unless otherwise ordered.

The great bulk of cocaine employed on this side of the Atlantic is imported in its crude form into Europe from South America, most of it going to Germany to be purified, re-crystallized, and fitted for the general market. Some of this crude cocaine is very

impure, and it is very necessary to test it and its products carefully for use ; this may be readily done by the methods suggested by Mr. John Williams, F.C.S. The purity of the *alkaloid* itself may be ascertained by dissolving the sample in absolute alcohol, and adding very cautiously, and drop by drop, strong hydrochloric acid, testing after each drop with previously damped (but not wet) litmus or tumeric paper, when neutrality or very slight acidity is produced, the ether can then be added and the process carried on as with the solid salt. If the cocaine operated upon is very impure, the addition of the ether to the alcoholic solution of the hydrochlorate will produce a milky liquid, which, even after some time, will be found very difficult to filter, as the very fine precipitate runs through the filter and the liquid cannot be got to filter bright. But by adding a somewhat larger proportion of ether, and allowing the mixture to stand with occasional shaking for some time, the milky precipitate at last becomes crystalline, and can then be filtered readily. A very pure sample of hydrochlorate hardly becomes milky at all, but deposits the crystalline salt in a very few minutes.

The variation in the quality of the hydrochlorate necessitates a ready mode of testing and, when necessary, purifying the salt, and Mr. Williams recommends the following process, which is simple, and depends upon the almost absolute *insolubility* of the hydrochlorate of cocaine in ether (*although the alkaloid is so freely soluble*), and the fact that most, if not all, the secondary salts (or impurities) appear to be soluble even when converted into hydrochlorate. The hydrochlorate of cocaine to be examined is dissolved in the smallest quantity of absolute alcohol of sp. gr. .795 ; to this solution it is simply necessary to add about six times the volume of pure ether, and allow the mixture, after shaking several times, to stand for ten minutes or more, when the crystalline precipitate of the pure salt can be thrown in a small filter, squeezed, spread on blotting paper, and allowed to dry. In the course of a few hours the smell of ether will have quite gone, and the weight of the salt can be ascertained. If the weight of the original sample has been taken, its quality can be at once ascertained. Both the alcohol and ether must be absolute ; in other words, quite free from water. Cocaine hydrochlorate purified in this manner is much improved, and if this process be adopted the complaint frequently made about its "mousey" smell, and the irritation and pain sometimes produced by the use of the salt will no longer occur.

It may be useful to mention here another very simple test which has been suggested by Mr. Maclagan. One grain of hydrochlorate of cocaine is dissolved in two ounces of water, to this two drops of solution of ammonia are added, and the liquid is then stirred with a glass rod so as to rub the sides and bottom of the glass. With a good sample of the salt well marked striæ will be at once formed where the rod has touched the sides of the glass, and very soon afterwards a copious crystalline precipitate will be deposited, leaving the liquid quite clear and bright. When the amorphous substance is present the solution becomes slightly milky, but no striæ are formed, and frequently no precipitate is separated, or if there be it is less copious than in the case of a pure sample, also less distinctly crystalline, and either ropy or at most of a flocculent character. In some instances no precipitate separates, but the liquid merely becomes milky, although the quantity of water used is only sufficient for retaining in solution four-tenths of a grain of true cocaine, or about half the quantity contained in one grain of the hydrochlorate. Probably even a more effectual test is, that of dissolving the salt in chloroform, which must be of a high specific gravity of 1.490, and precipitating by the addition of three times its volume of ether, sp. gr. .720 to .725, when a great bulk of the impurities will be left in the ether and chloroform. Chloroform may be made practically free from alcohol and water by shaking it with an equal volume of concentrated sulphuric acid and allowed to separate. It would require about 30 per cent. more of such chloroform to dissolve the salt when dry, but salt containing moisture is soluble in the same proportion as with unwashed chloroform.

The majority of the salts of the different markets appear to contain a percentage (rarely less than 1 or more than 2.5 per cent.) of a foreign substance answering to the description of what is known as hygrin, a specimen of which I exhibited at the meeting of the Odontological Society of November 7th, and which may be described as a viscid alkaloid, having the appearance of treacle; it is found in the mother-liquor after the extraction of the cocaine; it has a strongly alkaline reaction and combines readily with acids to form saturated compounds (salts), does not alter phenolphthalein, has a slight burning taste, is irritating, and dissolves freely in ether, chloroform, or alcohol. The most suitable source from which this base may be prepared is the mother-liquor obtained as a bye-product in the purification of cocaidine. According to

Dr. Stockman it is to the presence of hygrin that the disagreeable properties and effects which have been observed in many samples of the hydrochlorate are due. Notwithstanding the different opinions which have been given upon the subject there can be but little doubt, I think, that other bases are naturally associated with cocaine, and that they should be separated from cocaine preparations intended for dental and other medical purposes.

With regard to cocaine as a therapeutic agent in dental surgery I hold more than ever to the opinion I expressed in an article upon this subject, published some months ago in another journal, and to which I called attention at the meeting of the Odontological Society in November last, that we shall find the *alkaloid* itself a better preparation than the salts for dental purposes. The chief objection I then raised was due to its greater insolubility and consequently slower anæsthetic action, but I think this fault may be overcome by the employment, as I previously suggested, of ether as the solvent, the alkaloid being freely soluble in absolute ether; moreover, the ether would act as an antidote to the depressant effects which occasionally follow the administration of cocaine. Another advantage of the alkaloid in surgical operations is due to the anæsthesia produced by it being more prolonged and profound.

It is a question in my mind whether the hydrochlorate of cocaine *as a salt* possesses anæsthetic properties at all, and whether anæsthesia which follows its use is not due to the liberation of the alkaloid from the salt by the action of the alkaline blood when injected, or to the alkaline saliva when applied to the tongue or mucous membrane of the mouth. If an excess of acid be in the solution anæsthetic action is greatly delayed and does not occur until neutralization is effected, whereas if an alkali be added the anæsthetic effect is at once noticed. The Peruvian Indians appear to have understood its value from their habit of always chewing an alkali (lime) with their coca, without which they get little or no result, but with the alkali they obtain that happy feeling of apathetic content which I have found so well marked in some of my own experiences. Therefore, in the external application of the salts of cocaine I would recommend that the parts be previously well washed with an alkaline solution, as they are thus rendered more effective, and for subcutaneous injections in which ether would be a suitable medium I would recommend that the alkaloid itself be employed.

I consider *ether* a valuable medium for the reasons that it is a perfect solvent for the alkaloid ; it is a cardiac stimulant, and counteracts sudden failure of the heart's action in syncope or shock due to mental emotion, physical injury, or poisoning by cardiac depressants, and when used alone or with alcohol has a stimulant action more rapid than alcohol itself. Ether is also a vascular stimulant, and causes dilatation of the peripheral vessels, and thus renders the flow of blood through them more rapid, and so, by stimulating the heart at the same time that it dilates the vessels, renders the peripheral circulation very vigorous. Therefore, whether used as a solvent for the cocaine alkaloid, or injected as an antidote to the drug or its salts, ether is, I think, a very valuable agent for our purpose.

There are two recognised preparations of ether, viz.—First : *Æther B.P.* (C_2H_6O), which is a colourless, volatile, and inflammable liquid, prepared from alcohol, emitting a strong and characteristic odour, has a hot and pungent taste, contains not less than 92 per cent. by volume of pure ether, boils below 105° Fahr.; sp. gr. 0.735.

Second : *Æther Purus* C_2H_6O .—Pure ether, absolute ether, free from alcohol and water. Prepared by washing ether with distilled water, and then distilling from calcium chloride and recently calcined lime. Sp. gr. not exceeding 0.720. This latter is usually employed for subcutaneous injection, in doses of from ten to thirty minims, repeated at short intervals if required. As much as one drachm has been employed for a dose by injection.

Nitrate of amyl may also be administered by inhalation as an antidote, for it is somewhat similar in its action to ether. It causes at first a short, dry, tickling cough, followed by flushing of the face, throbbing of the carotids and their branches, a quicker and fuller pulse, a feeling of tension in the head, quickened respiration and giddiness, the latter being especially felt if the patient is sitting up. Its administration is attended with little danger, except in cases of bronchitis and emphysema, in which the difficulty of breathing may be seriously increased by the action of the drug upon the blood. In cases of aortic disease, it should be administered in the recumbent position ; it reduces blood-pressure, therefore is attended with little danger of apoplexy, as the tendency of the blood-vessels to rupture is reduced.

It may be useful to mention here that I have found *lanolin and cocaine* combined to act well in the treatment of sensitive dentine.

The cavity should be washed out with absolute alcohol, and the cocaine-lanolin applied on cotton-wool with the end of an excavator, using a rotary motion to work the preparation well on to the dentine, and then protecting it by packing a piece of cotton-wool tightly over it.

Lanolin is the purified fat of sheeps' wool; it is a cholesterin fat, having cholesterin instead of glycerin, combined with the fatty acid. It is *non-irritating*, and is very penetrating, possessing great absorbability. Preparations of mercury, perchloride, carbolic acid, iodide of potassium, &c., with lanolin, rapidly produce the physiological effects of the drug employed when rubbed into the skin. Cocaine-lanolin is also a useful application to inflamed gum, or to the gum prior to applying the rubber-dam; other uses will suggest themselves.

The doubts which have been entertained in some quarters as to the medicinal value and safety of cocaine are probably in a great measure due to the few unsatisfactory results which have followed the employment of some of the many impure and imperfectly prepared samples of the drug which have been put on the market since its introduction. Considering the minute doses of cocaine required to produce the necessary amount of anæsthesia, and the enormous quantities of the drug which have been disposed of in Europe and America since its introduction, the very few cases of really alarming symptoms which have followed its administration, speak volumes for the safety and value of cocaine. In the month of May last a gentleman informed me that his firm had manufactured and disposed of in small quantities over one hundredweight of cocaine; another manufacturer has employed within the last twelve months, 238 bales of coca = to 41,858 pounds, this being all made into salts of cocaine, and yielding a total of 922,917 grains = 131 lbs. 13½ oz.; this yield, giving 22.05 grains of the salt to the pound of coca leaves ($922,917 \div 41,858 = 22.05$ grains), was all disposed of within the ten months ending August 31, 1887. Therefore, I think cocaine may be considered at least as safe, in skilful hands, to employ, as any other of the many powerful drugs commonly in use as therapeutic agents. Although alarming symptoms have been recorded as having followed its administration by injection in some few cases, I am not aware of a single death having occurred as the result of cocaine administration, and the only hesitation I should entertain as to the wisdom of freely using it in

practice would arise from a doubt as to its purity, and to the fact of its requiring from four to seven minutes to elapse after injection before one can operate, a period of time that might appear much longer to the patient, and a very trying time to a nervous individual whose mind might be racked the whole time with the anticipation, at least of some amount of pain, if not a total failure of anæsthesia.

While I do not believe that cocaine is at all likely to supersede gas in dental operations, I do think that it may be used with advantage in certain operations, such as the removal, at one sitting, of a number of badly decayed and broken down teeth, and I think that it is likely to prove of greater value to country practitioners, who are less advantageously placed than their London brethren for obtaining the services of skilled anæsthetists.

For the removal of a number of roots at one sitting, which one is occasionally called upon to do, I should generally prefer cocaine to gas, for one can accomplish so much more, and with the advantage of not having to hurry. One case in practice will suffice to show my method of procedure in such instances. The removal of the upper right first and second bicuspid and first and second molar roots, badly decayed and divided. I requested my patient to well wash the mouth with spirit and water, to remove mucous and saliva, and immediately applied cocaine-lanolin over the tender and inflamed gum surrounding the roots, then injected the ethereal solution of cocaine between the bicuspid and molar on the palatal side, and between the two bicuspids and the two molars on the buccal side, and the teeth were satisfactorily and without hurry removed. It is occasionally convenient to be able to accomplish so much without pain for a patient who may have come a long distance, and whose time is precious, as in this case, when my patient came from the north of England.

THE Manchester Odontological Society holds a dinner on Saturday, the 14th inst., to which the President and Council of the Midland Branch of the British Dental Association have received invitations. We are pleased to see our Manchester friends offering their hospitality to their northern neighbours, and hope the dinner will be a success. We understand that it may possibly become an annual affair.

LEGAL INTELLIGENCE.

Thomas Smith against Frederick William Bradley.

IN the Wisbech Borough Police Court, before the Mayor, Mr. J. T. Hiscox, and five magistrates, on Tuesday, 10th January, 1888. Mr. R. E. Melsheimer, instructed by Messrs. Bowman & Crawley-Boevey, for the prosecution. Mr. S. D. Waddy, Q.C., M.P., instructed by Messrs. Ollard & Co., for defendant.

Mr. MELSHEIMER, in opening the case for the prosecution, said there would be little dispute as to the facts. The court would be asked to place a construction on the meaning of the word "use" in Section 3 of the Dentists Act. The provisions of the Act had become familiar to the public, and in this case care had been taken to avoid the use of any "name, title, or description," in the advertisements and circulars published by the defendant. The defendant having taken these precautions, it became necessary to invite him to use the word "dentist." If a postman had called with a letter, and said, "Are you Mr. Bradley, the dentist?" and received an affirmative answer, that would probably not be a using within the meaning of the Act, but if a stranger called for advice, and said, "Are you the dentist? I don't want to be operated upon by a bungler," a reply in the affirmative would be an offence against the Act. The defendant had taken and used the title "dentist," he not being on the Register of Dentists, and the bench would therefore be asked to convict him of an offence under Section 3 of the Act.

Mr. J. H. GRIMMETTE, of 48, Finsbury Circus, London, was called and deposed that he went to Wisbech on the 13th of August, 1887, and called upon the defendant, in company with Mr. Frederick Luce, and on seeing defendant, said to him, "Are you Mr. Bradley, the dentist?" and the defendant replied, "Yes, sir, I am." Witness then said, "My friend has a tooth that wants stopping," and defendant stopped the tooth and charged 2s. 6d. Defendant offered to make a set of teeth for witness free of charge, if witness would give him a London testimonial.

Mr. FREDERICK LUCE, of the same address, surveyor's clerk, deposed that he accompanied last witness to Wisbech. He confirmed the statement made by him. His tooth was stopped by defendant. He asked defendant whether he was the only dentist in Wisbech, to which defendant replied, "Well, there is another

man practising here as a dentist, but I don't think he knows much about dentistry."

Mr. THOMAS SMITH, of 21, Bedford Row, London, deposed that he was the common informer in this case, and had been instructed by Messrs. Bowman and Crawley-Boevey, the solicitors to the British Dental Association, to lay the information against defendant.

Mr. WADDY, for the defence, contended that the Act being a penal one, should be construed strongly against the people who had put it into operation. He complained of the way in which a trap had been laid for the defendant. The Act said "take or use," but the defendant did not take or use the word "dentist." They (the prosecution) had used it for him. They could not get him to use it. He had no more used the name or taken the name than if somebody had thrown a blanket over his head and said "You have taken that blanket." He could not be said to have taken it. The prosecution got witnesses to go down from London on August 13th. They got everything ready then, but the defendant hears nothing of it till January 4th. What does it mean? They do not bring before you (the bench) one single human being in Wisbech to whom he has used that name. The letters A.P.S., which mean "Associate of the Pharmaceutical Society" appear upon a brass plate over his gate. He has never called himself anything more at all. He has never taken the name or used it.

The magistrates retired to consider their decision, and on returning into court

The CHAIRMAN (the Mayor) said the magistrates have carefully considered this case, and they are of opinion that the defendant has brought himself within the provisions of the Act, and decide to fine him £5 and costs, including court fees and attendance of witnesses.

Mr. WADDY asked whether the bench would grant a case for the superior courts, if his client decided to ask for one.

The CHAIRMAN: We have no objection to grant a case.

REPORTS OF SOCIETIES AND OTHER MEETINGS.

The General Medical Council.

At the November meeting of the Council, Mr. MUIR MACKENZIE made some observations, which although not forming part of the dental business, and therefore not included in our report of last issue, nevertheless contained so much legal information bearing upon the working of the Dentists Act, that we subjoin the greater part of it, for the benefit of our readers.

Mr. Muir Mackenzie (the Counsel), after some preliminary remarks, observed that although the terms of the Act of Parliament under which the Council were about to exercise jurisdiction were very familiar to the members of that Council, he thought it desirable, for the purpose of explaining what he was about to say, to recall the exact words of the section in question, the 29th Section of the Medical Act. "If any registered medical practitioner . . . shall, after due inquiry, be judged by the General Council to have been guilty of infamous conduct in any professional respect, the General Council may, if they think fit, direct the Registrar to erase the name of such medical practitioner from the Register." The question as to the competency of the Medical Council was fully set at rest in a case which was tried in the Court of Queen's Bench and decided in 1863. The question before the court was whether the General Council had jurisdiction to remove a name from the Register for publishing a work, he would not say of the same nature as Mr. Allbutt's book, for that was the question to be decided, but a book which the Council adjudged to be an immoral publication. The manner in which the question was raised made it particularly applicable, because in that case the Council removed the practitioner's name from the Register, and then an application was made to the court for a *mandamus* to the Council to restore the name to the Register, on the ground that they had no jurisdiction. It was, therefore, in no sense an appeal; it was an application to a court whose function it is to keep the other courts within the limits of their jurisdiction, and if the Council had decided to remove the name on a ground which they had no right to do, then this court would be entitled to oblige them to restore it. The only person heard (in accordance with the custom of that court) was the aggrieved practitioner himself, and his affidavits indicated the course which had been adopted in his case, the same as had been followed in the present instance. In support

of the application it was contended on behalf of the applicant that the evidence showed that the applicant had not been guilty of any infamous conduct in any professional respect, and showed, moreover, that there had been no real inquiry into the truth or otherwise of the allegations. The late Lord Chief Justice said, on giving judgment :—"What authority have we to review the decision of the General Medical Council?" Another judge said :—"If it were impossible that a medical book could be indecent, I should be in favour of granting the rule ; but, inasmuch as it is possible to publish a book purporting to be a medical book, of an indecent character, I think we have no more right to inquire into the conduct of the General Medical Council than into any action under the first part of the Section." The judgment of the whole court was as follows :—"We are all agreed that Section 29 of the Medical Act makes the General Council sole judges of whether a medical practitioner on the Register has been guilty of infamous conduct in a professional respect. They have decided against the applicant, and the Legislature, considering the Council to be the best judges in such a matter, have left the matter within their hands, and we cannot interfere." He said the Council could see from that case that the proceedings were initiated precisely as they had been in the case before them. That decision had been acted on several times to his own knowledge, for the publication of treatises which the Council held to be indecent. In view of that decision, it was not only within the competency, but was the bounden duty, of the Council to inquire whether the book was indecent and unprofessional. He thought that, in reference to the question of what one might call the advisability of the Council exercising a jurisdiction of this kind, he would point out how, since the Act of 1858, the Legislature had signified its approval of this jurisdiction by the Council, in the only way it could, by reproducing those provisions in the Dentists' Register. He further pointed out that the very words of the Section were used in the Act of Parliament of 1874, to give to the Society of Apothecaries power to remove men from that body on the same ground. If the Legislature had thought that this domestic jurisdiction was improper or detrimental, would they not have touched these judicial powers ? He observed that the medical profession was by no means the only profession in which jurisdiction of that kind relating to professional matters existed. In the clergy there were offences which were not punishable by the common law, but which were

injurious to public morals, and which were provided for by the Clergy Discipline Acts, by which the bishop of the diocese could order an inquiry into an offence of a kind injurious to public morals, and he need scarcely allude to the discipline of the Incorporated Law Society, and the Inns of Court, as regarded the legal profession.

The Odontological Society of Great Britain.

THE Annual General Meeting of the Society was held on the 9th inst., at its Rooms, 40, Leicester Square, Mr. CHARLES S. TOMES, F.R.S., President, in the chair.

THE PRESIDENT announced that Dr. Miller, of Berlin, had been proposed for election as a corresponding member. Dr. Miller's name was well known in connection with the study of bacteriology in its relation to dental disease. Dr. Miller's name would come before the Society like that of an ordinary member, and would be balloted for at a subsequent meeting.

Mr. H. J. Barrett, formerly president of the Society, was elected an honorary member by acclamation.

Messrs. Augustin Paterson, L.D.S., William Mitchell, D.D.S. (Mich.), were elected resident, and Mr. H. S. Gould, L.D.S., of Madras, non-resident, members.

THE TREASURER (Mr. T. A. Rogers) presented his report. He spoke with feeling of the regret all present would experience at failing to see their late treasurer, Mr. Parkinson, and the more so since his absence was occasioned by his ill-health. Mr. Rogers congratulated the Society upon the prosperous condition of its finances, there being a balance in the Society's favour of over £116. During the year there had been 18 new members elected, six resignations, and three removals.

THE LIBRARIAN (Mr. Felix Weiss), in tendering his report, congratulated the Society upon the condition of the library, and the use the members made of the books. Each year more books were borrowed. He announced the receipt of the "Proceedings of the Royal Society," the "Transactions of the Medico-Dental Association," and the "Journal of Anatomy and Physiology."

THE CURATOR (Mr. Storer Bennett) briefly reported that fifty-three specimens had, during the year, been acquired by the Society, as against forty-one in the preceding year. Of these, nine illustrated pathological lesions in the lower animals. He believed

such dental diseases were far commoner in the lower animal kingdom than was usually supposed, and he would earnestly beg members to be on the look-out for specimens.

Mr. ARTHUR S. UNDERWOOD then read a paper upon "Erosion in connection with some points in the Minute Anatomy of Enamel." Commenting upon the unsatisfactory state of knowledge bearing upon the question of the true nature and etiology of erosion, Mr. Underwood said he had for four or five years had the advantage of studying a typical case. Describing the naked eye appearances in this patient, he stated the eroded surfaces were not specially exposed to the wear and tear of mastication, and were in places almost inaccessible to tooth brushes, while artificial teeth had not been worn. Caries existed, and had attacked eroded surfaces. The erosion presented a characteristic, smooth, hard surface, and was slightly tinted with yellow pigment. The lesions looked as if they had been caused by filing. The enamel was always more affected than the dentine. Sometimes the whole surface seemed to have been sliced off, and in one case three of the four surfaces, together with the crown, were thus removed, leaving a square pillar of dentine standing. In the incisors the labial surface was grooved, in the upper the grooves being smaller, but more numerous than in the lower. The lingual surfaces of these last, and the whole of the molars, were free from erosion, and the constancy of this immunity leads Mr. Underwood to believe that a perversion of sub-maxillary, or parotid saliva, cannot be held responsible for the pathological change. Dr. Black was quoted as having discovered that the surfaces of teeth exposed to a continuous current of hydrochloric acid (1 in 1,000) become changed as if eroded. Further, Dr. Murie described the teeth of a sealion, the most exposed surfaces of which were very much eroded.

Summing up the question of situation of the erosion, Mr. Underwood finds (1) surfaces most exposed to salivary secretions are not specially eroded. (2) The necks of teeth and the portion in contact with the gum are not specially selected, nor (3) are surfaces exposed to wear and tear; (4) while parts out of the way of mastication are commonly eroded. (5) Bland Sutton finds among the lower animals that erosion attacks abortive and imperfectly formed teeth. (6) Nooks and crannies wherein food accumulates and where caries is common, are usually free from erosion. (7) The seats of erosion are generally freely washed by saliva not exposed by lodgment of food, inaccessible to tooth brushes, and not used for the fixing of bands.

In three marked cases a gouty form of rheumatism existed, and the buccal mucus was exceedingly acid. In two cases the teeth were not eroded until middle life; in the third until the twenty-first year, then erosion suddenly appeared and progressed rapidly, following a severe attack of rheumatism. Tracing the effect of erosion upon the living tissues, it was found that the eroded surface was sometimes very hyperæsthetic, intolerant of acids, sometimes absolutely insensitive; the pulp may die before it is reached, or may become protected by secondary dentine, or sometimes it may be exposed while yet alive.

Reverting to sections of eroded teeth when examined under the microscope, Mr. Underwood contrasted normal appearances of enamel with those presented after erosion; he believes the fibres never to be in actual contact, a clear interspace intervening. This usually appears unoccupied, save occasionally, when a thin line, apparently composed of fine dots, may indistinctly be made out in it. The interspaces apparently do not branch. The enamel fibres are finely granular, being covered with minute black dots; the space between them is lighter, but still darker than the interspace.

In some tracts of enamel the fibres are striated, the striæ being produced by aggregations of the above-mentioned dark dots; they never coincide with any alteration in the fibres' thickness. In some conditions of enamel, especially in young enamel, the striated patches are coarser, due to the dots being larger and more widely separated, and in such instances lime salts are present in a proportion below what is normal.

In highly-magnified sections, the brown striæ of Retzius, appear to consist of coinciding points of very coarse granular material, similar to that of infant enamel, the interspaces being larger at these points and the edges of the fibre strongly defined. In sections of the enamel of teeth suffering from erosion, the above-named granular condition is present in an exaggerated degree; the dark dots in the affected patches appear to have run together destroying the identity of the fibres. The interspaces are larger, and especially in the lines of Retzius. The appearance noted is indicative, Mr. Underwood believes, of a condition which renders the tissues amenable to the causes, whatever they may be, that determine erosion.

A fact in support of this contention is that the changes detailed are not peculiar to the eroded surfaces; although confined

to eroded teeth, they exist below the surface and are, the writer of the paper believes, types of what had been on the surface and had caused destruction. Bacteria would seem to affect erosion only in so much as they may determine the formation of acid.

Speaking of the etiology of erosion, Mr. Underwood believes that there are special characteristic defects in the enamel of those teeth which become affected by erosion, and that such teeth under certain conditions become affected, these conditions being an acid state of the buccal secretions, a free washing of the enamel by these, and the use of injurious tooth powders.

The PRESIDENT suggested that Mr. S. J. Hutchinson should read his "Note on Erosion," and that the discussion should be taken upon the two papers.

Mr. HUTCHINSON said he had for some time been studying the subject, and proposed upon the present occasion to record a fact, which he believed had not previously been noted, in connection with the subject in hand.

He defined erosion as a wasting or denudation of the enamel and dentine, inexplicable by friction, attrition, caries, or the presence in the mouth of acid materials, *e.g.*, medicines, mucous secretions or saliva. Erosion usually attacks the enamel first, commonly appearing as a circular facet upon the labial surface of a tooth. This facet may be cupped. Mr. Hutchinson has observed that the eroded surface is covered by a curious film of discoloration. This is so thin as to be observable only by the assistance of a strong lens, but is perfectly unmistakable when once seen. Whilst invariably present on patches of erosion, this film is always absent from surrounding and healthy enamel. The material forming it can be scraped off with a blunt instrument. Examined under the microscope, the scrapings look like very minute circular epithelial scales. Seen in contrast the film appears black. Vigorous use of a firm brush and tooth powder fail to remove it; indeed, it appears as if it were an excessively thin layer of disorganized enamel or dentine. The appearance has been detected in patients varying in age between twenty and eighty years of age, in males and females, in smokers and non-smokers, in dyspeptics and those free from gastric disturbances, in the mouths of those who care well for their teeth and for those who do not. It is found in the pits and grinding surfaces of unopposed molars ground down by attrition.

Teeth so affected usually occur in the mouths of patients who

are not subject to caries. The appearance does not seem to be explicable by the action of mucous secretions, because it is confined entirely to surfaces not habitually in contact with these. This point was exemplified by the models handed round. Nor could the condition of the saliva determine it, as all parts of the teeth would be affected by this secretion. Nor would the agency of chemical action afford an explanation when the singular shape of the eroded surfaces were considered. Whether bacteria originated the appearances described had not at present been satisfactorily ascertained.

While putting the occurrence of the film on record as a new and original observation, Mr. Hutchinson proposed to leave to a subsequent occasion the explanation of its nature and origin.

Mr. FAIRBANK thought the subject very interesting, inasmuch as, although erosion was very common, we were quite ignorant as to its true pathology. Dealing with the causation of erosion, he said he found erosion mostly in clean mouths; it was rarely, if ever, present when that form of indigestion which is associated with decomposition of food is present. Personally, he believed that it was due to the action of acid mucus upon the enamel. He had found it most commonly at the necks of the teeth, and even when the gum was stripped up erosion travelled from the fang towards the crown. Decomposition of food played no part in the inception of erosion, and when caries attacked eroded teeth, which was seldom, it only did so after the general health had become depressed, and the vitality lowered.

Mr. STOCKEN had observed erosion in gouty persons, and had found that the habitual use of an alkaline tooth powder had benefited his patients.

Mr. F. J. BENNETT believed erosion existed in two distinct forms—one in which the enamel presented a smooth, polished appearance, while in the other the enamel was coated with a black film. In the last form he had found that gutta-percha fillings when removed, were covered with this same black film. He had also noticed a peculiarity about eroded teeth, which gave them the look as if they were artificial, and had been cut away on the whole surface, and then finely polished. He would also like to gain information upon another and important point. It was, whether dead teeth eroded. Some while back, a patient of his showed erosion in canines and central incisors, but the lateral incisors were dead, and quite free from erosion. He was unable to

say whether or not the erosion had existed in the mouth before the death of the laterals.

Dr. CUNNINGHAM thought the black film was not constant ; he was disposed to take exception to Mr. Hutchinson's definition, as he thought we could hardly exclude all chemical agencies in speaking of erosion. He had seen a case in which the mechanical action of a toothbrush has, after two hours, produced a condition resembling erosion. The fact that the erosion seems to start at the extreme margin of the enamel, *i.e.*, where the tissue is least resistant, would point in favour of a mechanical explanation. He believed in some instances abnormal conditions of the lip, adjacent to the eroded teeth, existed. The fact that the oxyphosphate cements lasted well in mouths in which erosion occurred, might indicate that an alkaline rather than an acid reaction of the mouth favoured that disease. He quoted a case of erosion associated with alkalinity of the buccal cavity. He would remind them that erosion was certainly capable of spontaneous cure.

The PRESIDENT failed to see why, if erosion were due to a structural defect, acted upon by unhealthy buccal secretions, the lesions were not symmetrical, since daily experience went to show that structural defects were usually bilateral.

Messrs. UNDERWOOD and HUTCHINSON having briefly replied,

The PRESIDENT said he did not propose to detain the Society with a valedictory address, as he considered one disquisition from the president was enough for each year. He felt that the president often got more than was his share of the credit, as the secretaries and other officers usually did far more for the benefit of the Society than did the president. He felt in leaving the chair he could heartily congratulate the Society upon its past year, as excellent papers had been read, good discussions taken place, and numerous and appreciative audiences attracted.

Sir EDWIN SAUNDERS then proposed, in appropriate and eulogistic terms, a vote of thanks to Mr. C. S. Tomes, as retiring president. Mr. T. A. ROGERS seconded.

Dr. CUNNINGHAM proposed, and Mr. W. BARCLAY, of Worcester, seconded, a vote of thanks to the retiring officers, and the PRESIDENT and Mr. WEISS returned thanks.

The PRESIDENT having thanked the readers of the papers, and those who had taken part in the discussions, announced that the next meeting of the Society would take place on February 6, when a paper would be read by Dr. Harlan, of Chicago, upon "The

Treatment of Pulpless Teeth from the standpoint of everyday Practice ;" also paper by Mr. F. Newland Pedley, upon "Reform in the Dental Departments in General Hospitals ;" and closed the meeting.

The following members were elected on January 9th, as Officers and Councillors for the year 1888 :—

PRESIDENT.—Daniel Corbett, Esq. (Dublin).

VICE-PRESIDENTS.—(*Resident*) Messrs. S. J. Hutchinson, J. H. Mummery, and W. F. Forsyth ; (*Non-resident*) Richard Rogers (Cheltenham), G. C. McAdam (Hereford), and J. Cornelius-Wheeler (Southsea).

TREASURER.—Thomas Arnold Rogers, Esq.

LIBRARIAN.—Felix Weiss, Esq.

CURATOR.—W. C. Storer Bennett, Esq.

EDITOR OF THE TRANSACTIONS.—Frederic Canton, Esq.

HONORARY SECRETARIES.—Messrs. Willoughby Weiss (*Council*), C. J. Boyd Wallis (*Society*), and E. G. Betts (*Foreign Correspondence*).

COUNCILLORS.—(*Resident*) Messrs. J. F. Corbett, J. Smith Turner, Sir Edwin Saunders, John Fairbank, David Hepburn, Ashley W. Barrett, Walter Coffin, Thomas Gaddes, R. H. Woodhouse ; (*Non-resident*) F. H. Balkwill (Plymouth), George Brunton (Leeds), E. Apperley (Stroud), J. H. Redman (Brighton), W. Bowman Macleod (Edinburgh), and R. Wentworth White (Norwich).

Liverpool Dental Hospital.

SOME twenty-seven years ago, the late Captain W. J. Newman commenced the benevolent work of providing gratuitous relief to the poor of Liverpool, in dental trouble. At first the demand was limited, and the duties were easily discharged by two or three willing co-adjutors, but as the hospital became known, the number of patients increased until it was found needful to secure commodious premises and obtain a properly organised staff of dental officers, &c. Year by year the number of cases multiplied, and under the guidance of a lay committee, the hospital flourished fairly well as a local charity.

Meantime, however, the demands of dental education were growing imperative, and the dental officers recognised the import-

ance of utilising the practice of this institution in connection with the curriculum of dental study. After a considerable delay, this was accomplished in the recognition by the Royal College of Surgeons, of the Liverpool Dental Hospital, as a school of dental surgery.

Unfortunately, the educational value of the hospital has not been duly appreciated by the lay committee, they regarding it chiefly in the light of a charity; hence it has come to pass that many hindrances have occurred to prevent the full development of a definite plan of instruction, and practice, such as may be found in most of the dental schools now in existence. Happily, some of these obstacles are now being removed, and there is a prospect of brighter days in store. During the last two or three months an effort has been made to enlarge the staff, and the following names have been added to the list of officers, viz.:—J. E. Rose, Esq., H. C. Quinby, Esq., C. Alder, Esq., as consulting dental surgeons, together with M. Quinby, Esq., J. Royston, Esq., W. Matthews, Esq., G. A. Williams, Esq., T. Mansell, Esq., W. Mapplebeck, Esq., and J. Pidgeon, Esq., as honorary dental surgeons. This notable addition to the professional strength of the hospital cannot but prove advantageous to its educational position, and must in due time with hearty endeavour on the part of all concerned, greatly extend the sphere of its usefulness, both as a beneficent charity, and not less as a thorough and well directed training school of dental surgery.

We understand that the members of the augmented staff dined together on the 4th instant, at the Adelphi Hotel, under the presidency of Mr. Waite, senior consulting dental surgeon. After a substantial repast, the chairman offered a few remarks on the past and present condition of the institution, and welcomed the newly appointed officers, urging upon each one of the staff the importance of the opportunity for doing valuable service in the cause of dental advancement, and making the Liverpool Dental Hospital equal to any similar institution in the United Kingdom. In the course of business which followed, Dr. Waite was elected chairman of the board of officers, and Mr. Frederic Rose was appointed registrar.

We congratulate our friends in Liverpool on their improved prospects, and earnestly wish them good success.

MINOR NOTICES AND CRITICAL ABSTRACTS.

Congenital Absence of an Upper Lateral Incisor Tooth as a Forerunner of Hare-lip and Cleft Palate.

Mr. R. CLEMENT LUCAS read a paper at the Clinical Society of London last month, on the "Congenital Absence of an Upper Lateral Incisor Tooth as a Forerunner of Hare-lip and Cleft Palate." He said the tendency of deformities to repeat themselves in succeeding generations, and even to exaggerate their defects, rendered an early recognition of their presence of some professional importance. He alluded to a family history he had published in the Guy's Hospital Reports for 1880, where he had traced eighty descendants of a woman who had supernumerary fingers and toes, and found that 30 per cent. were so affected. A case showing the hereditary tendency in hare-lip and cleft palate had come under his care in August of this year. A woman who had been successfully operated upon married, and had six children. The second child and the sixth presented the same deformity as the mother, the others escaping. The object of this paper was not, however, to discuss the repetition of pronounced deformities, but to show the danger of a deformity partially developed and likely to pass unobserved. He wished to point out (what he did not think had hitherto been described) that the congenital absence of an upper lateral incisor tooth may foretell the probability of cleft palate and hare-lip in a succeeding generation. He had been most careful to exclude any possibility of error through decay or extraction of the tooth in question. He illustrated his paper with three cases. The first, a man with congenital absence of the lateral incisor on the left side, had a daughter presenting precisely the same defect. The second, a woman aged twenty-five, who had a congenital absence of the right upper lateral incisor, brought her fifth child with right hare-lip. The third, a woman aged twenty-three, having congenital absence of the left upper lateral incisor, brought her first child suffering from hare-lip and cleft palate on the left side. His observations were few, and had extended over ten years, but the association of these defects was too remarkable to go unrelated. Had he been able to examine both parents, which was seldom possible in hospital practice, it is probable he might have collected more cases. Now that attention had been drawn to the observation, it was likely

that more cases would be collected. The author held the following deductions to be irrefragable: that the congenital absence of an upper lateral incisor tooth resulting from an arrest of development is to be regarded as a malformation closely related to hare-lip and cleft palate, and capable of transmitting each or both of these deformities to a succeeding generation. A dental member said that absence of the lateral incisor was of very common occurrence. To this Mr. CLEMENT LUCAS replied that the frequency of the loss was not an explanation of the absence of the tooth.

REVIEWS AND NOTICES OF BOOKS.

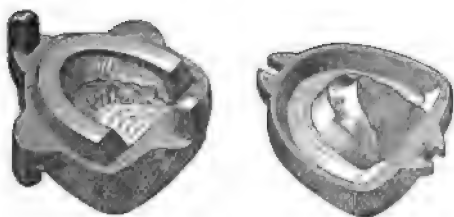
A MANUAL OF ELEMENTARY MICROSCOPICAL MANIPULATION FOR THE USE OF AMATEURS, BY T. CHARTERS WHITE, M.R.C.S., L.D.S., F.R.M.S., late President of the Queckett Microscopical Club. London, Roper & Drowley, 1887, pp. 103, fcap 8vo.

THOUGH this little book contains but a very slight and incidental reference to dental histology, it deserves a brief notice at our hands, not only as being the work of a well-known member of our profession, but also because it is likely to be useful to many dental students who are anxious to acquire some knowledge of general microscopy. The author states that the book "is designed with the aim of affording the youngest beginner such directions for preparing objects of interest and instruction in an elementary, but at the same time such a complete manner that, be he the merest tyro, he may grasp their details and work out his studies with the most satisfactory results;" that it "is to be regarded as but a manual of Elementary Microscopical Manipulation, and is not intended to supersede the larger and more extensive works dealing with the microscope and its revelations," &c. Mr. White's idea of elementary microscopy is, however, somewhat extensive, including as it does such subjects as the injection of animal tissues, dissection of insects, and photomicroscopy. And when we mention that within the space of less than a hundred pages are contained, besides the above, a short description of the microscope and its accessories, a tolerably full account of the usual methods of section-cutting, staining and mounting transparent and opaque objects, with chapters on the

infusoria, diatomaceæ, &c., it must be evident that, in spite of a valuable gift of brief and clear description, some of these subjects must be treated of in a superficial and not altogether satisfactory manner. Still, if Mr. White has not quite succeeded in doing what is well nigh impossible, he has at all events succeeded far better than might have been expected, and has produced a very useful little book which, if it does not enable the student to achieve "with the most satisfactory results" quite all that it professes to teach, will at least indicate to him the wide range of studies which his instrument is capable of opening out for him, and will create a desire for an acquaintance with some more advanced text-book on the subject.

NEW INVENTIONS.

THE Whitehouse flask introduced by the Dental Manufacturing Company, has some features which are likely to prove useful. The intermediate piece has a raised metal capping designed to strengthen the plaster, and to obviate the inconvenience arising from "raised bites." The left hand figure exhibits this raised portion, united to the lower part of the flask, and it will—taken in conjunction with the accompanying diagram—convey a good idea of the Whitehouse modification. A second peculiarity con-



sists in certain holes drilled in the top and bottom of the flask, with the object of preventing the plaster blowing out during the heating process. The need of this is not very apparent. There is the further advantage that the intermediate portion may be left out when it is not required, and the upper and lower parts then form a simple flask.

OBITUARY NOTICE.

WE regret to announce the death of Mr. David Gillies, at his residence Hillmount, Londonderry. This sad event, which took place on New Year's Day, deprives the Irish Branch, thus early in its history, of one of its members. Mr. Gillies, who was a Dental Licentiate of the College of Surgeons, began practice at the early age of nineteen in Derry, and had, we believe, been for years past independent of practice. His death will be regretted by many of his professional brethren in the sister isle.

ANNOTATIONS.

THE second corrected proof of the Register is now passing through the press, and those who have not yet registered, or whose qualifications are unregistered, have yet an opportunity of appearing correctly on the 1888 edition, and we sincerely trust that the omissions referred to in our leader will be largely reduced before the final sheets go to press.

IT is a lamentable fact that a number of licentiates of dental surgery are remaining unregistered. It is to be hoped that all practitioners who have qualified assistants whose names are not upon the register will take pains to impress upon them the importance of registering. It is a very simple way to assist in the important work of perfecting our register, and the neglect of it is the reverse of creditable.

THE list of new members elected at a recent meeting of the Midland Branch is one of the pleasant items of news, with which we like to begin our new year. It must be very gratifying to the secretary of the branch, and it is very gratifying to us. It may not be amiss to point out, what may escape the knowledge of the London practitioner, that his fellow-members in the country have great and serious difficulties to contend with. It is in the provinces that the most shameless quackery runs riot with the greatest success, and the greatest possible sympathy should be extended to those who endeavour to fight the uphill battle of "professionalism" in the provinces. It is very difficult to persuade men who are suffering severely in their annual incomes to be patient, they are not unnaturally eager to see the blazing quack

and flagrant charlatan brought to book, and when those who urge the claims of our Association say that a generation will set this all right, they may not unnaturally think that a generation is a good long time. It must not be forgotten then that the only real difficulty is one of funds, and that if the Association is joined in sufficient numbers to provide the necessary money, the machinery for protecting the professional dentist is at hand, and will be promptly and thoroughly employed.

THE spirit of English legislation seems to be but indistinctly understood by those who are continually calling out for more legislation whenever the Dentists Act seems to fall short of what they consider their personal wants. It is the practice of experienced parliamentary draughtsmen to state in well-considered, concise terms, the principles of a bill, the exceptions to its operation, and the machinery by which it is to be worked. No attempt is made to describe in detail the particulars of each and every case to which the enactments are applicable, for to do so would require an endless description, and every case that differed in any particular from those recited would, though fairly within its scope, be excluded from the operation of the Act. It is for the executive entrusted with the working of the statute to apply its provisions to cases for the regulation of which it was enacted. But however carefully an Act may be drawn, instances will arise in which the right administration is involved in doubt, and the difficulty can be removed only by an appeal to a high legal authority. Cases so decided become precedents for future determination, and constitute judicial, as distinguished from statutory law, or judges' law, supplementing Parliamentary law; and until all doubtful points have been determined by the law courts, the full scope of an Act has not been made known. One principle of the Dentists Act is, that certain professional designations shall be used only by persons registered in the Dentists' Register. Hitherto the prosecution of persons contravening this provision of the Act has rested upon written and published evidence, but there is nothing to show that a word-of-mouth contravention is admissible. Hence an unregistered person who thinks himself safe in the practice of dentistry so long as he avoids the use in writing and in print of the prohibited terms, will perhaps find that he is standing on thin ice, which may at any moment give way, and leave him permanently involved in legal difficulties.

THE following case, reported at the December meeting of the West of Scotland Branch, by Mr. James Cumming, which owing to want of space we have very slightly abbreviated, is not only amusing but scientifically very interesting, as demonstrating the extraordinary degree to which the sentimental side of the nervous system may influence the appreciation of pain. It has other interesting applications in reference to anæsthesia, which will be obvious to our readers:—I am seldom tempted to be deceitful to any patient, but in the case I am about to relate I could not resist being so. In our discussions on the hydro-chlorate of cocaine, printed in the JOURNAL OF THE BRITISH DENTAL ASSOCIATION of February last, I brought before you a very favourable and a very unfavourable case. The subject of the favourable case had occasion to call upon me three months ago, that I might see how absorption was progressing. I had left in her upper jaw one solitary tooth, right canine, large and strongly set, with a long fang. I saw it was much more prominent than need be for the bite, this induced me to suggest to the patient its removal in order to improve her appearance. She readily consented. Remembering my cocaine experience I suggested taking it out without an anæsthetic, or by administering gas? She requested that I should employ cocaine. Without frightening her by relating my own sufferings with it, I consented, with some misgivings, producing at the same time my discarded syringe and the glass tube in which I had made up the drug six months before. The needle had become entirely corroded, and would neither draw in water nor air. The thought struck me to try her with nothing but a puncture of the needle and the subsequent pressing of the piston, as before, and wait for two or three minutes till the deception might take effect, and then extract the strongly set canine; the tooth was a difficult one, and required tact to get it out. When the extraction was over, I noticed the expression of satisfaction and enquired how the drug had acted? "Oh, just as before, all right, not much pain." The patient is still under the impression that cocaine was injected before the operation, and I intend that she shall remain so.

BIRMINGHAM DENTAL STUDENTS' SOCIETY.—A meeting of the Birmingham Dental Students' Society was held at 71, Newhall Street, November 23rd, 1887. Mr. F. H. Goffe, L.D.S., in the chair, and amongst those present were Messrs. Madin, Sims,

Matthews, Foster and Naden. The minutes of the last regular meeting were read and confirmed and also signed by the chairman. The secretary read a paper on "Dental Caries, its causes and pathology." In this paper the opinions of different dental practitioners were set forth and compared with one another, and the conclusion arrived at was that although much may be done to arrest the disease, we may never hope to wholly eradicate it. At the termination of the paper, there was some discussion relating to the various views held by writers on the subject. It was resolved to omit the December meeting of the Society. Mr. W. R. Roberts, L.D.S., was elected chairman for the next meeting. The resignation of one of its members was announced. The meeting terminated with a vote of thanks to the chairman.

THE third ordinary meeting of the Odonto-Chirurgical Society (session 1887-8) was held in the rooms, 30, Chambers Street, Edinburgh, on Thursday, January 12th, at 8 p.m., W. H. Williamson, M.D., President, in the chair. The meeting was a conversational one, and, among other casual communications, the subject of "Cocaine, with regard to its use in Dental Operations," was introduced by Messrs. Watson and Amoore.

THE new list of members which is to go out next month will be in many respects an improvement on those of previous years, and will show a gratifying increase in our numbers.

THE decision in the case of Smith *v.* Bradley will create a precedent which is in itself an answer to the misgivings that have troubled the minds of many of our members with regard to the working of the Dentists Act.

APPOINTMENTS.

JAMES F. COLYER, L.D.S.Eng., has been appointed house surgeon to the Dental Hospital of London, vice Herbert Williams, L.D.S.Eng., resigned.

S. G. HUGO, L.D.S.I., has been elected Hon. Dental Surgeon to the St. John's Orphanage, St. Peter's Port, Guernsey.

CORRESPONDENCE.

We do not hold ourselves responsible for the views expressed by our Correspondents.

Mr. Bullin's Pamphlet.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—Although it is not likely that the common sense of the profession will be confused by the cloud of declamation which Mr. Bullin, in his anger, has been ill-advised enough to pour forth, it is well he should be answered. Mr. Bullin, it is evident, has not regained his temper which he lost in consequence of the very calm and moderate criticism of his address at Chester, which appeared in the Journal for June. Devoid of form in its style and reasoning, that address, as literature, might easily have been turned into ridicule by an ill-natured critic; and as science—well, I need not examine Mr. Bullin's science, it does not form the pith of the matter under discussion, and its value was sufficiently exposed by "L.D.S., M.R.C.S." The substance of the discourse might have constituted a harmless playful portion of after-dinner talk among professional brethren "across the walnuts and the wine;" but put forth as a presidential address, deserved much more severe treatment than it received. If, as it ought, the Journal is to criticise and endeavour to prevent injurious action by individuals, it is hard to see how the language and tone can be made more mild than the leader in question; and I am sure this will be the judgment of every impartial reader who will turn to it. Instead, however, of remaining silent, or of producing, if possible, some arguments in support of his views, Mr. Bullin immediately proceeded to abuse his opponents, and to impute to them base personal motives.

Whatever sympathy Mr. Bullin might have evoked, had he put forth his ideas with temperance, is, I am sure, forfeited by the violence with which he has expressed his sweeping condemnations. The writer of the article was a "cynical coward"; the men who, with the sacrifice of health, repose, and money, unselfishly devoted themselves to promoting reform of the profession, were "a small minority, who, by occupying the boxes and dress circle of our profession, become eligible for seats upon the Examining Board at Lincoln's Inn, with its coveted position and emoluments"; and the men to whom alone we are indebted, not only for its overthrow, but for the overthrow of the ideas which it represented, are held up to reprobation as possessed by the narrow spirit of the Association of Surgeons Practising Dental Surgery. These are mild samples of Mr. Bullin's invective.

Let the passages which have particularly excited Mr. Bullin's ire, and which he quotes, be examined, and let the impartial reader say whether these—isolated as they are from the qualifying context—can be tortured into an offensive meaning. The article in truth never

passed the limits of mild expostulation ; and indeed, to have treated Mr. Bullin's address with any display of feeling, would have been to attach to it an importance and significance which it never possessed. It might possibly have been better to leave Mr. Bullin alone from the first, and it is not necessary to imitate his example now in personal attacks. The views he puts forth in his pamphlet are expressed with extreme vagueness. I shall try to do him no injustice in interpreting and refuting them.

Mr. Bullin's political ideas are not clear or logical ; and the schemes he advocates are now not only, as they have always been, inexpedient, but are more than ever, impossible. The history of the extinct College of Dentists is very ancient history. The college is dead, and as incapable of resuscitation as the Heptarchy, and it is a great error to suppose that this can be matter of regret to any great number of the profession. Is it not absurd to suggest that a separate college could have prevented any of the imaginary grievances of which Mr. Bullen complains ? Those grievances, apparently, are mainly due to the fact that a dentist is not a fully qualified medical practitioner with every professional privilege, and a College of Dentists could obviously not have made any difference in this respect.

Dentistry is now, at any rate, a recognised legitimate branch of the medical profession, and it is not, and never was, logical, expedient or feasible to separate the dental branch from the united medical institutions of the country. Can it be logically maintained that dental surgery is less a portion of general surgery than ophthalmic or aural surgery ? To put this question seems to me to answer it. General surgery embraces the whole body, including the teeth, and it is impossible, logically, to constitute a distinct, detached, independent profession having the care of any one organ or part, be it eye, ear, or tooth. The general medical practitioner, although his advice is sought in the first instance in most diseases, seeks the aid of a specialist when necessary, and, as a rule, the practitioner attempts as seldom to fill a tooth as to operate for cataract or iridectomy. He recognises that operations of this special kind need special skill, and he accordingly calls in an ophthalmic or a dental surgeon, as the case may be. There exists no distinct qualification for any specialist except a dentist. For this there are good reasons into which I need not enter. There is nothing illogical in this. Education for the dental diploma, and examination, make of the candidate a dental surgeon—a practitioner educated in anatomy, physiology and surgery—the sciences upon which the art of dentistry is based—and specially trained as an operator in his particular department. He is certainly a practitioner of surgery, a dental surgeon, and so must remain if properly educated, whether he obtained his diploma from an independent dental corporation or a college of surgeons. So much for the logic of the case. Logic must often in practical matters yield to

expediency. Is it, then, expedient to separate ourselves from the great and powerful body to which we logically belong, even if it be admitted that medical legislation is defective, and that the medical council, as at present constituted, is not sufficiently representative of the dental branch of the profession.

The leading article on the Dentists Act in the December number of the Journal clearly makes visible one fundamental fact, namely, that most real grievances, such as the present impossibility of totally preventing quackery and unqualified practice, are due to weakness of medical law in general, rather than dental in particular. Is it at all possible to believe that grievances existing for generations, in spite of protests and efforts of twenty thousand medical men, backed by the influence of the Medical Council, the universities, and medical corporations, would be at once swept away at the behest of a few hundred qualified and unqualified dentists speaking through a dental council? Few will be led to believe this; and few will fail to perceive, if they inquire into the history of medical affairs within late years, that the dental branch is advancing with the main trunk, and that it cannot fail so to advance whilst its present connection exists. Dental surgeons and dental surgery were not fully recognised as they now are. A few years ago most hospitals had no dentist on the staff, but now it would be impossible to find a first-rate institution which had not at least one dental surgeon. Some of them, like Bartholomew's, have a corps of dentists—and there probably does not exist a medical school without its staff of lecturers on dental subjects. That dentists are not eligible for some medical societies, like the British Medical, is due to the fact that the bye-laws of these societies admit only those on the medical register; but these bye-laws are capable of revision, and that the spirit to promote such revision exists is shown by the fact that the Medical Society, the oldest in London, has admitted to its membership a "L.D.S." possessing no other qualification. Mr. Bullin is wrong in thinking that hospital dentists are excluded from managing boards of these institutions, at least in London. They are to be found on several to my knowledge; I have not enquired whether there is anywhere a bar to their admission. I doubt it very much. Mr. Bullen complains that the medical profession generally do not "acknowledge a 'L.D.S.' socially unless he has taken an unnecessary (*i.e.*, a surgical) diploma." Well, if one thing is more evident than another in the dental as well as in every branch of the medical profession, it is that a man's social position depends entirely upon his personal qualifications. The possession of a diploma does not make a gentleman; there are men with high medical qualifications who remain low in the social scale; there are men with a minimum of diploma qualifications who are socially in the front rank. As a man may have the highest diplomas and still be so unpractical as to be a failure in the work of his profession, so he may possess the best

collegiate qualifications and still lack those personal attributes which lead him into the society of people of refinement and culture.

The man—be he dentist or doctor—who now-a-days ascribes his own inferior social position, to his profession, has usually himself alone to blame. If any proof of this were needed it might be found in the fact, of which we are all aware, that men who years ago practised dentistry without diploma of any kind received such honours as the Fellowship of the Royal Society—the highest distinction that the most exalted and exclusive of European societies of the kind has to bestow—and others were prominent in those social spheres where men of mark and distinction are alone admitted.

Next, is it feasible to overthrow existing arrangements, and to obtain sole management of our own affairs? This could be brought about only through the legislature. A very strong case would have to be made out before Parliament would listen to any suggestion. The tendency of medical legislation of late years has been towards consolidation of the whole profession, and entirely against the establishment of new, independent, and diploma-giving bodies. Witness the recent amalgamation, in this matter, of the Colleges of Surgeons and Physicians. It is perfectly certain, moreover, that any proposition for a separate dental council or corporation would be strenuously opposed by the great medical corporations and the medical profession, and by a great many of the most influential dental practitioners who approve of the present system. It is quite evident also that no change would be made in the present law which allows a man with a general qualification to practise any department of surgery he may choose. Could it be suggested that a surgeon, legally qualified to perform capital operations, ought to be prevented from stopping and extracting teeth, or debarred from styling himself dental surgeon? Whilst there is no doubt few would attempt to practise dentistry without special training, there can be equally no doubt the legislature would not interfere if some chose so to do, any more than it would if they attempted ophthalmic surgery, or any other speciality. Granting there are flaws in the Dental Act, and that the Medical Council is imperfectly constituted, and not fully competent to attend to dental business, is it not probable Parliament will seek to mend matters, rather than repeal laboriously-constructed legislation, and overthrow useful established departments of government? If the dental profession were unanimous in demanding such a change, or any radical change of the kind, it is doubtful whether it would be entertained; how much more doubtful must it become if the measure were strongly opposed, as it most assuredly would be, by any influential section. This opposing section would not be composed merely of malcontents, such as constituted the defunct Association of Surgeons Practising Dental Surgery, but by the men who, through their labours and sacrifices, as well as the weight of their personal influence, have achieved for dentistry the recognised position it now holds.

The facts—as to logic of the situation, expediency of an entire separation of the dental from the medical profession, and feasibility of procuring legislation for the last-named purpose in face of the certain opposition of the medical profession and of a large influential section of the dental profession—these facts were as cogent at the date of the inception of the College of Dentists and the Odontological Society as they are at the present day. They were recognised, were broached and discussed at the former period, and it was their overwhelming weight and no other consideration which led the pioneers of dental reform, including the founders of the College of Dentists, to adopt the only course which common sense dictated—the course which has resulted in the elevated position of our profession; elevated through insistence on the high education of the dentist; elevated through full authoritative recognition of dentistry as a branch of the medical profession; and elevated by means of a special act of Parliament enforcing education, preventing the assumption of false dental titles by the unqualified, and, so far as an act of Parliament can, guarding the public and the profession against quackery.

These, I repeat, were the facts finally recognised and accepted by the two parties which at first divided the profession—parties working for similar ends by different methods. After thorough discussion, made more thorough by the vehemence with which some individuals held out in favour of their particular views, the broad lines of future advance were projected and agreed to by the leaders. Of these leaders Sir J. Tomes took the first place, and with him, in full accord, were the best men of the now united sides. Of these (taking them at random from the mass), such men as Arnold and Thomas Rogers, Edwin Saunders, James Parkinson, T. Underwood, and Lee Rymer, may be named as average samples from the bulk. These are the kind of men regarding whose conduct Mr. Bullin makes many extraordinary insinuations. He implies, among other things, either that they wilfully took a course which they knew would be detrimental to the best interests of the profession; or that they acted from petty personal motives; or that they weakly were led or coerced into a line of conduct of which their consciences disapproved. These are monstrous accusations. It is evident that as shrewd capable men of the world aiming at practical objects, and not entertaining Utopian ideas, they did their best to achieve an important public work. And they did achieve it. They made of dentistry a legally accepted, recognised, and administered branch of the medical profession, provided with all the necessary machinery for further progress. In his allusions to Sir J. Tomes Mr. Bullin refers to him with reverence, yet lets it be understood he considers him either capable of taking a part in intrigue, or of consciously submitting tamely to conditions hurtful to the profession and humiliating to himself and associates.

It seems almost invidious to name the men to whose personal en-

deavour the profession is most indebted for the work of later years, and particularly for the passage of the Dentists Act, but two may be taken as a type of those we have happily still among us—Sir John Tomes and James Smith Turner. To these two, who are but types of their colleagues in the work, to these two, as president and secretary of the Dental Reform Committee, the profession owe a debt which they can never repay. Mr. Bullin writes as though nothing were easier than to get great ancient corporations to alter their charters and constitutions, and nothing easier than to carry special Acts of Parliament for the regulation of professions. To do this needed, first, personal authority and professional qualifications not only of unimpeachable character, but of great weight, and, second, the ability to demonstrate the importance of proposed legislation to public as well as professional welfare. This could be done only by men able to prove their unselfishness and public spirit; and if ever men, by their real sacrifices and their abnegation of personal aims, did this, it was done by the leaders of our profession in promoting the later movements of dental reform. These leaders—I speak of those not named (including members of the College of Dentists) as well as those named—had no personal end to gain by dental reform. Their positions were assured and their fortunes made—so far as fortunes could be made for dental practitioners; but, for years they gave up ease, time, and money to the promotion of measures for the improvement of their profession, and for the protection of the public. These are the men at whom Mr. Bullin sneers, and to whom he imputes base personal motives. Many of these men are happily still among us, and prominent members of the British Dental Association. The future of the Association is in the hands of all its members, who by their votes control its organisation; and it is not to be supposed that any measures tending to the advancement of the Association, or of the whole profession, will in the future lack the support of those men to whom the Association owes its existence, and to whom our profession is indebted for most of the improved circumstances by which, in the present day, it is surrounded.

Much of Mr. Bullin's reasoning is so transparently fallacious in reference to every one of the real and imaginary grievances which he cites, that it needs only slight examination to expose its worthlessness; and even if his facts and generalisations were indisputable—which is far from being the case—it must be still obviously the reverse of true that these grievances would not have existed under another *régime* which he seems to advocate—an independent dental council and an independent dental college.

Let us examine some samples of his method of reasoning. He instances cases of facial neuralgia and abscess due to teeth, cases, he alleges, in which, owing either to the incompetence or cruel dishonesty of the medical man in charge, there have been inflicted upon patients prolonged suffering and injury which might have been prevented by a dentist. He gives similar instances in other directions,

and upon these founds the wide deduction that the medical profession, or the majority of its members, are capable of such ignorant or systematic inhuman behaviour. To a like effect is his argument in the case where he states that a medical man lost his head on the occurrence of alarming symptoms in a patient under anæsthesia, whilst the dentist retained his presence of mind, and by prompt action saved the patient. It is not likely that Mr. Bullin's address will receive any attention from the medical profession, or that they will be troubled to refute his insulting generalisations. To doubt that occasionally a medical practitioner may make a mistake in the diagnosis of a simple case, is not more necessary than to believe the whole profession either crassly ignorant or cruelly dishonest; and that an average medical man would be, as a rule, incompetent to take measures for the restoration of a fainting patient is about as probable as that an average dentist would swoon from terror when called upon to extract a loose temporary tooth. Then (upon a statement which he does not prove) he reasons that because in one town medical men send their patients, for tooth extraction, to an unqualified quack, therefore the whole medical body, on every opportunity, "ignore and punish the L.D.S." Will any number of licentiates support a statement of this kind? I do not hesitate to say that it is grossly unfair to the medical profession, and without substantial foundation; and I take leave to doubt whether Mr. Bullin is not in error, even in the one instance (in the "fashionable southern town") which he publishes.

In refutation of Mr. Bullin's amazing statements as to the spirit which animates the medical profession, two solid facts may be given, out of scores, which might be cited, equally convincing. At the annual meeting in Edinburgh, the Association was received by the College of Surgeons (who lent their building); whilst every mark of respect and honour which the profession could expect was shown by the College and the medical faculty of the University. The same things happened at Cambridge, where the medical vied with the other authorities of the University in honouring, and in lavishing hospitality upon, those whom they recognised, and publicly acknowledged, as representatives of a legitimate branch of their profession.

What Mr. Bullin means by insistence that a holder of the M.R.C.S., in addition to the L.D.S., must often or always be a surgeon first and a dentist afterwards, is difficult to determine. Inquiry at the dental schools will prove that students who take extra qualifications are not less—although certainly not more—accomplished dentists than those who hold the dental diploma alone. Most general surgeons, with high surgical qualifications, are also graduates in medicine; would Mr. Bullin call those men physicians first and surgeons afterwards? The truth is, that although it may not be necessary for the mastery of his craft, extra culture can be no detriment to a practitioner. Many take high degrees in arts; are these to be called men of letters first and practitioners afterwards? The human intellect, when of tolerable de-

velopment, is usually able to compass knowledge beyond the technicalities of any profession. Mr. Bullin, for instance, parades some classical and scholastic learning, yet I should be sorry to call him a literary man first, and a dentist afterwards. The bias and prejudices which Mr. Bullin ascribes to many doubly qualified members of the Association are disproved by their lives ; since there exists nothing except their own feelings of attachment and devotion to bind them to dental rather than medical institutions, and to make them work as they do for the welfare of the dental profession.

Mr. Bullin's pamphlet may probably do harm, for it will give countenance to the apathetic, and to grumblers who find it so easy to be wise after events, and to decry, years after their accomplishment, measures in whose promotion they took no part. These are the men who did nothing for their profession in its time of greatest need, and will do nothing now. Mr. Bullin's attacks, on the other hand, will, I am sure, stimulate all loyal members of the Association to renewed exertions : and we may with confidence believe that the work so well begun, whose greatest obstacles have been overcome, will be carried to a triumphant end.

It is at least not likely that our Association, which is happily now so well established, can be seriously damaged by statements unsupported by facts, and in glaring contradiction to the personal experience and knowledge of the majority of its members.

Your obedient servant,

HENRY SEWILL.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—In common with many of my fellow practitioners I have received, presumably from Mr. Bullin, an address from this gentleman dedicated to the Midland branch of the British Dental Association. It is a voluminous pamphlet bearing upon Mr. Bullin's presidential address to the members of this branch, delivered some months ago at Chester.

I take it that the writer challenges us to combat the views therein contained, and invites us to sympathise with him in his many grievances. First Mr. Bullin says that he joined the Association, because "we ought to sink all personal feelings for the common weal," and acting upon this excellent advice he decided when called upon for a presidential address "to give a sketch of the history of the profession past and present, and utter words of caution and encouragement for the future."

He tells us he honestly expressed his own opinions, although judging from the way in which they have been received, I contend that he did *not* "sink all personal feelings," but rather took an opportunity of ventilating his views upon very old and vexed questions, irrespective of the feelings of the present leaders of the profession, whom he describes as blundering in their professional pride.

Mr. Bullin is pleased that he has "received thanks for his address from all quarters," and lays the flattering unction to his soul that his brethren are "all but unanimous" in patting him on the back.

Mr. Bullin's idea of unanimity is evidently gathered from three letters from two anonymous writers, who may or may not be very influential men, but whose views are certainly not representative.

Your Journal saw fit to criticise severely this address, and Mr. Bullin asserts that you had no right to such views! Why should the president of a branch constitute himself the censor of our Journal?

The publishing committee have an undoubted right to express their views upon any professional matter, and they would be unworthy of our confidence if they failed to speak out plainly, although it clashed with the address of a president.

He also says, "I hoped I had to deal with gentlemen." This is an unkind insinuation, and reminds one of the advice given to a barrister with a weak case "bully your adversary." One is tempted to recall the names of the individuals so stigmatized, and to make a hazy guess of what Mr. Bullin's idea of a gentleman may happen to be.

The British Medical Association is described as a "great trades union" (I trust he has commended this opinion to his friend the talented president of the North Wales Branch of the British Medical Association), and after this uncalled for remark he says, "that the Medical Council has done its best to hamper, harass and insult the dental surgeon individually, and the dental profession collectively since the year of grace, 1859." It is the old fable of "The fox and grapes," and if only the L.D.S. could join the British Medical Association, and be looked upon as a medical man by the Medical Council and the British Medical Association, he would be only too happy to recognise the good services of these bodies to the profession. The L.D.S., however, is only licensed to practise dentistry, and has no *locus standi* as a medical practitioner.

Mr. Bullin gives us the text of several admiring letters from dental surgeons to himself endorsing his opinions. He asserts from these letters, and his own personal knowledge, that "they are the views of the majority of the members of the British Dental Association, and of the still larger number of British dentists outside the pale of our Association." I refuse to accept this statement upon such evidence, and, instead of asking the publishing committee of the British Dental Association to test the opinion of the profession as to their wish to continue to be associated with the College of Surgeons, and under the management of the General Medical Council, I propose that Mr. Bullin should send out circulars to every registered dentist, and learn for himself and all of us, what really is the opinion of dentists upon these points.

I am proud of our association with the College of Surgeons, and the General Medical Council, and I should be sorry to have our connec-

tion with them severed, or in any way interfered with, for I contend that we gain in professional status and prestige from this triple alliance.

Mr. Bullin compared medical men with dentists in his address, and of course much to the disadvantage of the former. When these comparisons were called into question by you, he says he does not depreciate medical and surgical qualifications, but denies to their holders the sole right to administer anæsthetics, and the possession of a superior or equal knowledge of dentistry.

Now as to the right of a L.D.S. to administer anæsthetics, I submit that this question should be brought before the Council of the College of Surgeons, so that dental surgeons may know for all time what is their privilege in this matter. It has always appeared to me that no man should give an anæsthetic unless he is qualified to meet any emergency that may arise; that is to say, unless he is fully prepared for any dangerous symptoms, *e.g.*, asphyxia, syncope, &c., and further, he should be able to perform such operations as laryngotomy and tracheotomy, if needed. I maintain that the hospital education of a L.D.S. does not come up to this standard. Again, in the event of death, a medical man would appear before a jury and the world in a better position than a L.D.S.

Mr. Bullin hopes that no L.D.S. or M.R.C.S. would give an anæsthetic without satisfying himself as to the condition of the "cardiac region." Does he seriously mean to say that a L.D.S. is competent to diagnose morbid conditions of the heart? It is frequently difficult for experienced physicians to detect "bruits," and surely it is not expected of dental surgeons. I doubt if many could detect the coarser lesions of the heart, *e.g.*, mitral or aortic mischief.

Mr. Bullin is extremely misleading in stating that the length of time required for taking the L.D.S. diploma is five years, whilst it is only four years for the M.R.C.S.

It is true that three years are required for mechanical work, and two years for hospital attendance, but it is distinctly stated in the curriculum that professional education must extend over four years. As well might he say, that it will take an average student six years to pass the M.R.C.S. and L.R.C.P. as the two colleges are now united, and the surgical qualification cannot be taken alone. The facetious (?) remarks about the mesmerism practised at a certain dental hospital in regard to the M.R.C.S. diploma are in questionable taste. It is only right that the staff should urge men to take full qualifications, and so keep up our reputation as surgical specialists. Do not teachers at medical schools advise men to take the F.R.C.S. for similar reasons?

Mr. Bullin is fond of stories, and mentions that the medical men in a fashionable southern town send all their patients to an untrained dentist for the extraction of teeth, in preference to recommending

them to men holding dental qualifications. This is much to be regretted, but the moral deduced is utterly nonsensical. He also seems hurt that the medical profession will not recognize a L.D.S. in the same way as an ophthalmic or aural surgeon. The reason is very simple—he does not hold a surgical qualification.

Mr. Bullin compares the professional careers of two brothers educated respectively as a surgeon and dentist. The L.D.S. is not put upon the staff of a general hospital like his brother, who practises ophthalmic surgery, and for this reason his professional position is said to be “on a level with the hall porter, minus a salary!” This is a most ridiculous simile, and could only exist in the writer’s imagination. Mr. Bullin is aggrieved because the L.D.S. does not receive for his £10 (examination fee), a diploma as a medical man! Such was never dreamt of by the profession, nor contemplated by the College of Surgeons, and would neither be warranted by the course of study required, nor by the examination on the surgical side. I sincerely hope that no off-shoot of the British Dental Association will be started, as we are all anxious for the unity of our profession; and in the sight of our Association we are all equal, being honourable members of our specialty.

I am, Sir, yours faithfully,

London, *Jan. 2nd*, 1888.

M.R.C.S., L.D.S., but not J.P.

Dental Journalism.

TO THE EDITOR OF THE “JOURNAL OF THE BRITISH DENTAL ASSOCIATION.”

SIR,—It is not my intention at present to enter far into the controversy which Mr. Bullin seems bent upon provoking. His statements and arguments may be safely left to be dealt with by other members. Because Mr. Bullin’s views were criticised in a manner displeasing to him, he has not scrupled to impute to the Journal committee motives which their individual actions during years of the political history of the profession negative. Mr. Charles Tomes, the chairman of the committee, and men like James Smith Turner, Charters White, Canton, and James Parkinson are charged, among other disgraceful things, with being possessed by the spirit of the Association of Surgeons Practising Dental Surgery. Some members of the committee must in Mr. Bullin’s view present rare specimens of tortuous intellect, for they (and I must include myself) were engaged throughout its existence in persistently fighting against that obnoxious Association, and in exposing in the medical press, the hollowness of its pretensions to represent the body whose title it assumed. When I add that I agree with every word of the article on Mr. Bullin’s address, I may leave this part of the subject and turn to my main purpose. This is to express my opinion upon the method of management of Journals like ours. If I have any claim to be

heard on this subject, it may be found in the fact that for many years I have been actively engaged in dental journalism, and for fully fifteen years have taken share in editorial management of a well-known weekly medical paper. This experience has clearly demonstrated to me what I believe no journalist will dispute, namely that it is impossible to efficiently work any journal, unless there be at the head of the staff an editor armed with enough power to maintain consequence, consistency, and harmony in editorial utterances.

A journal of an association like ours ought to support in politics the views of the majority of members, and to oppose what the editor considers hostile to those views from whomsoever it emanates. The Journal committee serves to keep the editor in touch with the members, and the discussions at its meetings define the main lines on which the editor must travel. Such a mode of management does not exclude the expression through the Journal of the views of the minority or of any individual, for the Journal is always open to articles or letters from those who may dissent from the policy or views editorially advocated.

It is exactly on lines such as these that the *British Medical Journal*, representing 12,000 members, has been brought to its present position of success; and I have never yet seen in its columns any suggestion so absurd as that the Journal would be improved if the editor were to adopt in important discussions a colourless neutral tone, because some individual or a minority of members might be hurt if any opposition to their views were expressed. Everyone must recognise a fact, illustrated on every side in the political controversies of the day, that men who would avoid pain had better, if thin skinned, avoid politics even on so comparatively narrow a field as ours. If they do not stand aloof, but insist upon entry into the fray, and cry out when touched as though sorely wounded, they are alone to blame for the ludicrous figure they may present.

Your obedient servant,

A COMMITTEE-MAN.

The Lancaster Meeting.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—As your correspondent writing in last month's Journal on the Lancaster meeting has chosen so modest a signature, I hope he will excuse my expressing the opinion that he has misunderstood the object of the promoters of the discussion at that meeting, and the situation generally.

The very object (as I understand it), of Dr. Waite's address, and the discussion upon it, was, as "A Novice" says, it should be, "How each member of the profession can do his part to make it respected by the public, each doing his duty as a practitioner and a man to

forward the consolidation and unity of our noble profession." What is wanted is encouragement and support, and that is what we should like our Journal to give us. Our work is rough and hard, and many of us are new to it, and perhaps prone to error. We should like our Journal to give credit to those who have worked hard and done so much for us in the past, and to treat with respect and encourage our Presidents, when they spare neither trouble nor expense to make our meetings successful. When a zealous and energetic secretary of a branch makes a special appeal to arouse us out of our "discontented isolation," we do not like to see figures brought prominently forward in a leading article which, if they could be substantiated, would only have the effect of bringing discredit upon his efforts.

I hope when "A Novice" gains more experience, he will realise that he ought to possess as active and intimate a connexion with the work of the Association as if he lived in London, and be prepared to take a fair share of the drudgery of an Association which is essentially provincial.

It is only by the best esteemed practitioners in *all parts* of the kingdom *uniting*, that real progress can be made and the centralising influence of the London societies counteracted.

Yours faithfully,

17, Lendal, York.

THOMAS EDWARD KING.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—Your correspondent "A Novice," having very recently come into contact with the Representative Board of the British Dental Association, with laudable activity jumps into the arena to show his chivalry to the Representative Board, in attacking the Midland Branch with reference to the Lancaster Meeting, implying that it is acting in opposition to the parent society. This is not so. The Midland Branch went to Lancaster to break up fresh ground, with a view to extend the influence of the parent society.

In the first and last paragraphs, "A Novice" attacks the president of the branch, and then, with theatrical sublimity, begs that the matter should be let drop, and all work together with love and harmony for the good of the cause.

Well! let "A Novice" have the manliness to sign his name. He is another example of "A man who throws stones from behind a wall," but dare not raise his head above it, lest his identity should be discovered.

With reference to what he says about my remarks at Lancaster, *re* "The Retrospect," and the omission of mention of the Manchester Meeting in 1875, and the name of Mr. Sidney Wormald, the organizer thereof, I beg to reiterate that the writer of that article attempted to write dental history, and left out one of its most important events.

One might as well write a history of the rise and progress of railways, and leave out all mention of the Stephensons, and of the first line of rails laid. If "A Novice" had attended that meeting as I had the pleasure of doing, and seen the enthusiasm which prevailed, he too, would have felt that its omission as a matter of dental history was a mistake, and I say again, let us give "Honour to whom honour is due."

I quite agree with "A Novice" that each member of the profession should wake up to his duties and responsibilities with regard to elevating the status of his profession, and not sit down with complacent indifference, Micawber-like, waiting for something to turn up.

The Dentists Act is fast becoming a dead letter in the provinces, its provisions are being constantly evaded and its penalties ignored, and I fear that the British Dental Association has done little, and is disposed to do less, to make it the "tower of strength" we foolishly hoped it would be. In fact, the present condition of dentistry in the provinces is fast becoming worse than the former. Charlatanism is springing up in its worst forms, and nothing is being done to stop it.

I would say further, that we in the provinces are trying to read the "Signs of the Times" for ourselves, and not through London made spectacles, for with such aids "things are not what they seem." Then let us get more in touch with each other by means of the Journal and the Representative Board, and by more frequently meeting together to discuss the political aspects of our position, try to find out the weak points of the Dentists Act, and unite together to get its defects remedied, sinking selfish interests and party differences, and be determined to fight until we win.

In conclusion, whatever may be said of the Lancaster meeting, it proved a success, inasmuch as it led to a better organisation of its forces, and, as imitation is the best form of flattery, I may add that its action is being followed by some of the other branches.

Apologising for trespassing so much on your space,

I am, dear sir,

Yours very truly,

I. RENSHAW.

Rochdale,

January 5th, 1888.

Unregistered Practitioners.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—In the editorial article referring to the Dentists Act in the December number, an example is given of the ease with which men may practise dentistry under fictitious medical titles, but I think the following is very much neater done than anything the article in question mentions.

As a trial, the party under description visited a certain town twice

or three times a week. When it was found the venture proved remunerative, our nonesuch took a good house, and apparently settled peaceably in the midst of half a dozen other practitioners. The following is the manner in which he evades the Dentists Act, and likewise deceives the public. Mr. Y., late with Mr. Z., surgeon-dentist. He also exhibits specimens and floods the town with circulars.

That the number and power of advertising unqualified quacks is diminishing is very questionable. My experience is, that unregistered men are rapidly gaining confidence in their mode of practice, and increasing in numbers fast. This is very serious to young practitioners and the dental student who is spending much time and money to qualify, and expecting to be protected by the law. The contended tone of the article will not be readily digested, especially when taken with the fact that the Representative Board have had counsel's opinion upon the matter, and that such opinion is unfavourable.

If such barefaced infringements as the one described, can go on quietly and peaceably, registration, qualification, and the Dentists Act are not worth much, in spite of the fact, that some members of our profession can view the situation in such a calm and undisturbed fashion.

Our thanks are greatly due to Dr. Waite, for the manner in which he has brought the matter of revision of the Dentists' Register before us. In the work now being done, doubtless many such cases as the following will be brought to light.

A dentist's name which appears in several of the Dentists' Registers is not to be found in the one for 1887. Still this man is practising just the same as before the name was erased. What will have to be done in such a case, will the name be restored to the Register, or will he loose the right of using the title dentist? No doubt the cause in this case arises from not acquainting the registrar he had changed his address. Such cases show how imperfectly the working of the act is being carried out.

Yours very truly,
HALI.

The International Medical Congress.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—I was sorry to read a letter in your issue for November from a correspondent who shelters himself under the *nom de plume* of X. Usually I am of opinion that anonymous communications should be treated with well-merited silent contempt. A man of courage is never afraid to append his name in support of his opinions, be they right or wrong, but I should feel guilty of base ingratitude were I to allow this attack upon our American hosts to pass unchallenged and without a word of protest. X has evidently returned from Washington (I assume he was there, although he does not fully en-

lighten us upon that point), with anything but an appreciative mind, or he would not have omitted to mention the many features of interest which claim the admiration of a non-prejudiced visitor. I am free to admit the strictest discipline was not always observable, but they are a freedom loving people, and withal understand their own methods, and so far as one outside the inner circle could judge, there was an utter absence of friction in carrying out the arrangements for our delectation and instruction. If some of the papers were unable to bear the crucial test of a profoundly scientific mind, there were others fully up to the mark, and although some may have failed scientifically, they were mostly of an eminently practical character. Further, did X not know that the dental section held daily clinics, where much useful work was done, and many hints given to those from across the sea; hints and ideas that I, for one, am thankful to bring home and shall freely utilise, and if I have learned something, possibly others have also been enlightened.

X asks "whether International Medical Congresses are really calculated to promote the advance of Science?" Undoubtedly they are, for in addition to the older members assembling for the interchange of thoughts, though he may term them "faddists, cranks and pseudo-scientists," an incentive is given to younger thinkers, who are thereby urged to employ their leisure hours in amplifying the suggestions brought under their notice, thus the aim and purpose is achieved, knowledge is advanced, and suffering humanity greatly benefited.

In a dubious half-hearted sentence, X allows that it is quite possible for a Congress to have "value *perhaps* in its personal and social sides." His opinion is somewhat less hearty than that of the worthy President of the Congress who, in replying to a vote of thanks, stated he hoped the time would come, and not distantly, when not only medical and scientific men would have their Congresses, but that trades and commercial interests would be associated for like purposes and reap the advantages of International meetings, and he saw in that idea the hope of future peace and prosperity.

X has inadvertently omitted all mention of the lavish hospitality bestowed upon the guests. He has not told of the receptions, banquets, garden parties, excursions by road, rail and water, and lastly, the conclusion of the programme of entertainments, by a trip to the wonderful Falls of Niagara, all of which we enjoyed at the expense of our hosts. I suppose these are vanities to the acutely scientific X; and yet the net result of such attention is to engender within most participants spontaneous good feeling and hearty reciprocation, the natural outcome of which is to draw together by mutual respect the two great English speaking nations, uniting them in the bonds of compact brotherhood, that side by side they may advance to the amelioration of the condition of the human family. Surely, Mr.

Editor, the achievement of this object counts for something, and if so, I deny that the Congress was, in any sense, a failure.

I am, Sir,

Faithfully yours,

19, Finsbury Square, E.C.,

CHARLES WEST.

December, 1887.

Electric Mallet.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—In justice to myself, I must ask you to allow me to correct an impression which has arisen in the minds of many, viz. :—That I have allowed Messrs. C. Ash & Sons to bring out the old form of pneumatic mallet, known for many years past as Dr. Gaylord's, as my invention.

This has been brought about certainly by the illustration issued in Messrs. C. Ash & Sons' quarterly circular, and also in the October number of the British Dental Association Journal for the past year.

The pneumatic mallet I lent to Messrs. C. Ash & Sons to copy is the Gaylord mallet, but having an increased length of the hand-piece, so as to allow of the Webb Electric Pluggers being used, and this is the only point I claim as my own, although I consider it one of great importance to users of the Webb Electric Mallet.

2, Cork Street, W.

CLAUDE ROGERS.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—We regret that any question should have arisen as to the form of Pneumatic Mallet, introduced by Mr. Claude Rogers, and with which we associated his name.

To make the matter quite clear we have shown Mr. Rogers' Hand-piece, which is designed to carry the Electric Mallet Pluggers, in the December, 1887, number of our Quarterly Circular, side by side with the ordinary form of Pneumatic Mallet Handpiece, which carries points with *screw ends* and which has been known to the profession for so many years past.

Yours faithfully,

CLAUDIUS ASH & SONS.

NOTE—ANONYMOUS letters directed to the Secretary of the Association cannot receive attention.

P.O. Orders must be accompanied by Letters of Advice.

Communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

Subscriptions to the Treasurer, 40, Leicester Square.

All Contributions intended for publication in the Journal must be written on one side of the paper only. The latest date for receiving contributions for the current number is the 5th of the month.

Members are reminded that their subscriptions are due in JANUARY, and are requested either to remit them direct to the Treasurer, at 40, Leicester Square, or if more convenient, to pay them through their bankers, or through the agency of one of the Dental Depots, and so save unnecessary postage, &c., in applying for the same.

SPECIAL NOTICE.—All communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

THE JOURNAL
OF THE
BRITISH DENTAL ASSOCIATION
A
MONTHLY REVIEW OF DENTAL SURGERY.

No. 2.

FEBRUARY 15, 1888.

VOL. IX.

Legislation versus Quackery.

IN our December leader on the Dentists Act we alluded to the fact that the evils of illegitimate practice and quackery, whether as regards their hurtfulness to the profession or the public, are quite as prominent in every branch of the medical profession as in the dental. This statement is well within the mark. The character of illegitimate practice may have become, in some respects, modified in late years, but its extent is still enormous; and when it is seen how vast are the fields apparently occupied fully by charlatanry of one form and another, the wonder is, indeed—without examining below the surface—where and how the general practitioner finds a place.

The sum which is annually spent in the advertising of

quack medicines and appliances must amount to many hundreds of thousands of pounds, and it has been stated that the expenditure by the public in purchase of such articles equals in total, if it does not exceed, the combined earnings of the whole medical profession. Such is the credulity of the public, that any nostrum put forth with plausibility and sufficiently advertised, is certain of a large sale ; and it is abundantly demonstrable that persistence in the publication of specious falsehood is what is alone needed to ensure popular acceptance. Nothing is too gross for the common imagination ; in many well-known instances inert ointments of lard and the simplest of domestic medicines have, before now, proved a veritable gold mine of profit to their proprietors, and have not only always been put forth, but in sober earnest have been accepted as specifics for diseases of the most opposite origin and character. Examination of the ludicrous puffs in which the virtues of this panacea are vaunted, excites astonishment that any sane individual should be deceived by their gross and palpable absurdities, and that any one should trust such statements when health, perhaps life, depend upon their truth. Such is the extent of credulity and incredulity—each in the wrong direction—displayed by the masses (belief on the one hand in the marvellous or miraculous, disbelief on the other hand in the solid achievements of science), that it has been maintained with strong show of reason, that the lower grades of popular intellect have not advanced since the days when witches were solemnly tried before high tribunals, and being condemned, were burned at the stake. To anyone sufficiently versed in physiology, the old belief in witchcraft is not one whit more absurd than acceptance of the grotesque quackeries of to-day. A pill which would really on occasion cure, say, tic-douloureux and diabetes, or a galvanic belt which might be relied upon to eradicate dys-

menorrhœa and heart disease (a comprehensive term), could not be considered less miraculous than the spell by which an enemy was destroyed, or the charm by which the evil influence was averted.

Besides specifics with such universal pretensions, nostrums for the cure of almost every single malady are pushed with equal success, and it must be noted particularly that some proprietors of the most advertised medicines of this class have now also begun to announce their readiness to give medical advice to their customers.

Another stalking-horse under cover of which profitably and easily to carry on illegitimate practice of medicine, is found in the manufacture and sale of galvanic appliances. Nearly all the vendors of these advertised frauds do, indeed, in a limited sphere, act as medical practitioners; many styling themselves medical electricians, and offering to advise invalids as to the proper treatment of their diseases.

It would be a weary task to examine the whole range of these forms of quackery. We have said enough for our purpose. The individuals who devote themselves to amassing wealth by these nefarious means, show a moral obliquity approaching to crime, since their wares, although sometimes harmless in themselves, yet do vast injury by often leading real sufferers with curable disease to rely upon useless means, until the malady has reached a hopeless stage beyond the reach of science. We have spoken of popular credulity—it is very often credulity sharpened by suffering, and must excite more sorrow than anger. Can it be a wonder sufferers are loth to suspect that men may be vile enough to trade upon human weakness, and to swamp all feelings of pity in the greed for wealth. Then there is the *post hoc propter hoc* fallacy, which produces its crowd of *bond fide* believers in every quack specific. The last remedy applied in disease gets the credit of the cure.

Acute diseases which do not soon kill tend towards cure, and even in chronic organic or malignant maladies, there are in most cases periods of ease for the patient or temporary mitigation of symptoms. Again there is the vast class of imaginary invalids with functional disorders whose sufferings are often not less painful because without organic foundation, invalids whose symptoms disappear as soon as they have faith in any one mode of treatment, and are brought to believe in the imminence of a cure.

All this leads us to one of our main points—a consoling reflection—namely, that the operations of dentistry, like those of general surgery, are of such visible tangible reality and value, that they leave comparatively little room for fraud. Although toothache specifics may find a ready sale, it is not likely any considerable section of the public will be led to believe in the possibility of healing the breach in a decayed molar by drugs, or causing a new set of grinders to spring from toothless gums by use of a patent lotion. Dentistry is, in short, open to quackery, but much less so than most departments of practice.

Space will not allow us even to name more than a few of the other classes, besides those already mentioned, who, without qualifications, practice with impunity in one or other department of medicine. There are hosts of advertising venereal doctors, besides bone setters and medical herbalists, whilst great numbers of chemists not only practice over the counter, but visit patients at home.

In spite of this vast amount of quackery and of violation and evasion of the Medical Act, the fact remains that there never was a time when the general practitioner, consultant, or specialist, was more respected, appreciated, or more fully employed than now, quackery finding its sphere of action in the sufficiently large residuum of the ignorant and credulous among all classes of the public.

This fully applies to dentistry; and just as it is rare now-a-days to find a well-to-do family without a regular medical attendant, so is it becoming more and more rare to find a family without their chosen dentist, whose skill receives recognition, appreciation and gratitude.

Consideration of the facts which we have touched upon brings out what we had mainly in view, namely, the truth that no scheme of legislation short of a species of Medical Inquisition, which would be unworkable if carried, could be devised to entirely put down quackery; and we have sought to show that dentists even now have comparatively little in this regard to complain of. Charlatans are not by any means so safe from the penal consequences of infringement of the Dentists Act as they seem to have imagined, neither is it so easy to evade the Act as many of our enemies, and not a few of our friends have supposed; and the chicanery by which unqualified pretenders have fancied they might with impunity violate the law, is not unattended with the dangers of illegality. When once the full powers of the Dentists Act have been developed, we believe that there will be still less ground for complaint; and the most that we in common with the rest of the medical profession, can expect from legislation in the future, is perhaps a wider scope for the penal powers of the Medical Act, whereby the assumption by the unqualified of titles implying possession of a legitimate diploma may be easily and surely punished. To look for anything beyond this, we are sure, will only lead to disappointment.

ASSOCIATION INTELLIGENCE.**West of Scotland Branch.**

THE monthly meeting of the West of Scotland Branch was held on Thursday, January 26th, at eight p.m., in the Hall of the Faculty of Physicians and Surgeons, St. Vincent Street, Glasgow. Mr. JAMES CUMMING, L.D.S.Glas., President, in the chair.

After the usual formal business, Mr. J. R. Brownlie, L.D.S.Eng., read the following paper :

Six Months of the Hastie Motor.

In asking your attention to the results of six months' experience with the Hastie motor, I crave permission to say in the first place that my connection with this subject is not a commercial one. My relations with the Messrs. Hastie are fully described by the terms buyer and seller, while the eminent firm in London, who have so long and successfully catered for the wants of the dentist, and who are now the agents for this motor, have up to this date given no sign that they are conscious of my efforts to improve, and to spread the knowledge of this most desirable application of water power.

My apology for so soon directing attention to this subject again is not so much my interest in it, as that of others. I could be quite content to look on the measure of relief obtained by the adoption of this motor, as ample compensation for the trouble of arranging and fitting it up, but while my foot has thus been relieved, my pen has been having somewhat more than usual to do. In saying this, I am not to be understood as complaining ; on the contrary, I have had much pleasure in answering enquiries regarding it, and will gladly do so still. It is probable, however, that in putting on record my short experience, I may thus anticipate some of the questions addressed to me regarding it and give point and value to others.

Let me say at once that the experience of the past six months has been quite satisfactory. Not only have I been able to do all that I ever did with the pedal engine, but much that used to occasion a run into the workroom, I have got into the habit of doing at the side of my chair. But I esteem it most of all for the relief it has afforded me from the tear and wear of working my former engine. With constant use the various parts have settled down into most satisfactory form. Under a constant

and sufficient pressure of water the motor instantly responds to the pressure on the button. The speed continues under the most perfect control, but that which most surprises those who have seen it is the power of instantaneously arresting the motion. It matters not at what speed it may be running, the motion ceases simultaneously with the downward movement of the second, or cut off button. Movement follows quickly upon the opening of the supply valve, but no interval of time can be detected between the movement which cuts off the water, and the absolute stoppage of the burr or drill.

The advantage of this instantaneous arrest is well illustrated in the case of a burr in motion coming in contact with the coffer dam rubber, and consequent rolling of itself up in it. This has occurred several times, but in no instance was the rubber torn or even perforated, nor was the patient conscious that anything unusual had occurred. Twice, on finishing fillings, the paper disc has caught and rolled itself up in the same way, but before the rubber was torn, or the patient disturbed, the motion was arrested. In another case the rubber was torn, my position at the time not being convenient for the exercise of this instant arrest, but the tear was slight, the coffer dam remaining efficient to the end of the operation.

Let me here remark in passing, that in such an accident the No. 7 handpiece is admirable. In closing it the point is at once set free both from handpiece and rubber. With an excitable person the advantage of this perfect control of the motion can hardly be over-estimated, and experience has led me to demonstrate the fact before beginning, in all cases where the patient seems at all anxious.

The rate of speed best adapted to the work in hand is variously stated in connection with different motors. Possibly one motor may do best running at a high rate of speed, while another works to advantage at a more moderate pace. But in addition to the heating from friction, it is only natural to expect that with a high rate of speed the tendency to excitement on the part of the patient will be greater. My experience with the Hastie is in favour of a low rate of speed, and I count it one of its good points that it works well at a low rate of speed, even slower than might be required under almost any conditions. Associated with a wall engine the more conspicuous features of the arrangement are—a clear floor ; it is most convenient, swinging with the operator's hand ; it relieves

him of all effort ; it sets him free to assume any required position—combining with these any rate of travel, and instantaneous starting and stopping ; it is always ready to work to full advantage, and, beyond oiling, seems to require no attention. My motor is running now as it was fitted up for me over six months ago.

Without seeking to exhaust the list of its advantages, we may look now at the other side of the account. To say that it has developed no drawbacks, would be to claim for this motor perfection, which I am far from doing. We have to remember that it was designed originally to drive the sewing machine ; had it been to work the dental engine, it would have been better adapted to our wants. It is nearly sufficiently good looking to be used in the operating room, but it is better elsewhere, it works as well and is thus rendered practically noiseless. The buttons connected with the supply and cut off valves, are placed rather under and at the side of the chair ; one of them rises as the other is pressed down, so that one or both stand a little (about an inch at the highest) above the floor level. Possibly some might feel them a little in the way, but they cause me no inconvenience. I have commended it for the power of working slowly. At a moderate rate of speed its motion is quite true, at its slowest it is not quite regular, though it never stops. This, however, applies to a rate of slowness not possible to the pedal engine. A real annoyance, the result of an overlook in fitting it up, is due to the drawing of water in other parts of the house, while the motor is running. The taps being capable of delivering as much water as the pipes will carry, the opening of one means the lowering of the pressure beyond what is required to drive the motor, so that the speed is reduced, or the motion may be quite arrested. Had the water supply been taken from a larger pipe, this would have been avoided. I have not had it altered, as the threat of placing the domestic supply under restrictions, has hitherto contributed to a satisfactory running of the motor. Were it to do again, however, I would draw the supply from a main, or the largest supply pipe within reach.

If there be any other defects or disadvantages I have not yet discovered them. In practice as in theory, such a motor makes the very strongest claims upon the attention of the dentist, and would ere this have been much more largely adopted, but that unfortunately there are two lions in the way, an adequate water supply and the task of fitting it up. With respect to the former,

a pressure of twenty-five pounds per square inch, seems to me out of proportion to the effect to be produced. As regards the latter, as the subject is now before the profession, the task of fitting up a motor is somewhat formidable. The motor itself can be purchased, and probably also an engine adapted for it, and having got these, or having modified an ordinary engine, the purchaser proceeds to apply and connect the parts. He may have to devise and arrange a means of starting and stopping adapted to his wants. He will have to superintend every step in the process, not being able to call in workmen familiar with it, and if he be so fortunate as to escape all but minor mistakes, he will then be in possession, provided his water supply be adequate, of the most ready, capable and obedient of assistants.

How far it may be possible to minimise such difficulties, remains to be tried, but there is reason to believe that we may have a water motor, equally well adapted, working at a lower pressure, more intimately associated with the engine it is to drive, and having only such attachments as the average plumber would be capable of making, for any objectionable features it may presently possess affect neither the principle nor the working. They belong to the perfecting of details and the better arrangement of parts.

In writing thus you will not understand me as giving expression to any latent feeling of want of sufficiency in the work done by this motor and engine. As it is now running, I venture to affirm that it has no competitor. It has done all I looked for from it and more, and I may be permitted the wish, on behalf of those who have experienced the same need, that this excellent invention was more generally available.

NOTE.—Since the latter part of my paper was written, I have received the last quarterly circular from the Messrs. Ash, and find that the several parts can now be had through them. A woodcut is given shewing the arrangement used by Mr. Campbell. The wall or bracket engine, to which I have been referring in this paper, swings from the wall, and only the buttons for starting and stopping, are on the floor. I have left this part of my paper as it was, in the conviction that greater simplicity is not only greatly to be desired, but will prove worth the seeking.

[The report of the discussion is delayed till our next number, in order that an illustrative block may be prepared.]

Meeting of the Central Counties Branch.

A MEETING of the Central Counties Branch was held at 71, Newhall Street, on Thursday, January 26th, under the presidency of W. E. HARDING, L.D.S.Eng. (Shrewsbury).

There were present: Messrs. B. Neale, J. D. Orrock, G. O. Richards, Jordan Lloyd, W. Palethorpe, C. Batten, W. R. Roberts, C. Sims, Armston Vice, F. W. Richards, R. Owen, F. H. Goffe, H. Grove, J. Roberts, and J. Humphreys.

Mr. W. E. HARDING continued a description of his experiences at the recent International Medical Congress in America, giving a practical illustration of Dr. Farrar's system of regulation which was much appreciated.

Mr. JORDAN LLOYD exhibited a rare odontome removed by him from the mouth of a young man under his care at the Queen's Hospital, Birmingham. It occurred on the right side of the upper jaw, and apparently included the second and third molar, and was considered quite unique.

Mr. W. R. ROBERTS exhibited a large epulis removed from the front of the lower jaw, from a patient attending the Birmingham Dental Hospital, and handed round photographs of the patient prior to its removal.

Mr. ROBERTS, of Dudley, showed models of a similar case.

Mr. HUMPHREYS exhibited a right superior maxilla showing a canine tooth, which had been prevented from erupting normally, and which lay in a horizontal position in the lower portion of the alveolus; also skulls of the python and cobra.

Irish Branch.

THE second meeting of the Irish Branch was held on Saturday evening, January 28th, at eight o'clock, in the Albert Hall of the Royal College of Surgeons in Ireland. The President of the branch, DANIEL CORBETT, M.R.C.S. L.D.S.Eng. (President-elect of the British Dental Association) in the chair. The following members and visitors attended:—Daniel Corbett; A. F. Thomson; R. T. Stack; H. G. Sherlock; R. H. Moore; Daniel Corbett, jun.; J. McStay, Belfast; S. G. Reeves; A. J. Watts; J. S. Thomson; Charles Wall; D. M. Smith; M. J. Bloom; M. J. Bloom, jun.; F. McClean; H. H. Campbell; Charles Merrilees; Charles Tucker;

E. M. P. Murray ; John O. Duffy ; A. H. Corley, President of the Royal College of Surgeons ; W. H. Waite, Liverpool, and W. Booth-Pearsall, hon. secretary.

The minutes having been read and confirmed, Dr. THEODORE STACK, in the unavoidable absence of the hon. treasurer, R. Hazelton, read the financial report, stating that all the members of the Irish Branch had paid their subscriptions for 1887 to the parent Association and to the Irish Branch, leaving for the expenses of the branch a sum of £6 15s. He had received thirty out of a total of forty-five subscriptions to the Irish Branch for 1888. These subscriptions have been handed in by gentlemen who have already paid their subscriptions for 1888 to the parent Association.

The adoption was moved by D. CORBETT, jun., seconded by J. McSTAY (Belfast), and carried unanimously.

Mr. CORLEY, President of the Royal College of Surgeons, Ireland, read a short paper on "Lancing the Gums in Difficult Dentition." He thanked the secretary for having been invited to the meeting, and expressed the pleasure it gave him to find that the branch would like a communication from him. He had some difficulty in choosing a subject, but as he had had considerable experience as to that which he selected, and, as he hoped to gain much information by a discussion upon it, he ventured to submit his views and observations. It was not necessary to dwell on the importance of the subject. There was scarcely an idiopathic infantile ailment that had not been set down by one authority or author as originating in difficult dentition. Thus, for example, affections of the larynx, bronchial tubes, stomach, bowels, nervous system, including central inflammation, spasm, paralysis, convulsions, delirium and coma, had been ascribed, and with reason, to this cause, and the speaker gave many examples derived from his own experience, or quoted from standard authorities of the evil effects of abnormal or ill-timed dentition. He alluded to the views of Marshall Hall, who, in the exuberance of his zeal for the direct treatment of diseases arising from irritation in this part of the periphery of his reflex system, advised apparently indiscriminate and frequently repeated lancing of the gums, for almost all infantile diseases. The speaker had commenced practice with a decided prejudice against surgical interference, but was compelled by observation and subsequent experience, to adopt the procedure. He was satisfied that in the great majority of cases

where by positive evidence the irritation could be traced to teeth-ing, or even where by the method of exclusion, it might be inferred to exist there, lancing the gums would be found either curative or to a large extent palliative. He had given the subject much consideration, and had weighed carefully the arguments in favour of and against the process. The advantages claimed for the operation were three, first, the freeing of the tooth by incising its sac; second, the relief of tension in the covering membranes by a free division, the cut at the same time severing minute nerve filaments and blood vessels; third, the local depletion relieving congestion and inflammation. To this he would be disposed to add a fourth, perhaps the most important, though most difficult of explanation, this he would name a vaso-motor or reflex effect, produced by the local incision. He did not pretend to explain how this acted, but he likened it to the extraordinary relief from angina pain or cardiac asthmatic distress, which the application of a single leech to the upper part of the sternum frequently produces, or to the sometime magical result of a small blister in deep-seated neuralgias or arthropathies. It was objected that the amount of blood drawn by the gum lancet, like that by the single leech, could not account for the resultant benefit, and accordingly some other explanation was necessary. He therefore suggested that it was not very unreasonable to suppose that when a peripheral vascular and nervous area of such limited dimensions as that involving an imprisoned tooth, is capable under circumstances of irritation from within, of producing such various distant and serious reflex disturbances as those enumerated, that an incision from without, such as that produced by the lancet, might have a correspondingly active and comprehensive tendency in the direction of cure.

It was also objected that in some of the worst cases where the use of the lancet seemed indicated, the tooth had not yet left the bony case, and consequently its sac could not be opened or freed from the erupting organ's pressure. Perhaps in order to secure the maximum amount of curative result from the operation, the four objects indicated should be gained, viz., the opening of the sac, the section of the membranes, nerves and vessels, the local depletion and the before-named reflex effect. It, however, had been found from experience that one or more might be followed by cure or relief, and therefore the inability to accomplish all, should not deter the surgeon from attempting to gain as much as possible.

The three chief objections were first the uselessness, second the danger, and third the formation of tough cicatrices, which might subsequently delay or interfere with the proper eruption or growth of the tooth. The first argument was usually advanced by those who, like the speaker in his early years, rejected any procedure which had not abundant scientific grounds to rest upon. Experience taught most men that a wise and judicious empiricism was a safer guide than crude and imperfect scientific dogmatism.

As regards danger, it is true that there had been cases where the operation had been followed by continuous and fatal hæmorrhage, and of these the speaker knew one instance. But the production of anæsthesia was sometimes attended by fatal results, and the same might be said of tooth-extraction, and of many other operations, minor as well as major. Surely, then, such a result could not be used as an argument against anæsthetics or other operations. Lastly, on the subject of cicatrices, it was well remarked that the eruption of the tooth, even in a case of the most premature use of the lancet, could scarcely be delayed long enough to let the cicatrix become thick, tough, or contracted, and it was obvious that a cicatrix imperfectly organized, would offer less resistance to an advancing tooth than even the uninjured gum.

A discussion followed which was of short duration. The President of the Branch, whilst thanking Mr. Corley for his paper, remarked that early teeth troubles seldom came under the notice of the members of the dental branch of surgery; they were mostly treated by physicians and surgeons. In his experience of fifty years, he had not been once called upon to lance an infant's gums.

Mr. Francis McClean, Mr. Sherlock, Professor Stack, and Mr. W. Booth-Pearsall took part in the discussion and supported the President's cases of serous dentition by instancing cases of severe irritation both in first and second dentitions. Mr. Sherlock created some amusement by recommending an "eclipse" incision.

In replying to the observations made by the members present, Mr. CORLEY said that he quite appreciated the point made by the President, which had not occurred to him when writing the paper, but he had seen so many and so serious cases in which the efficacy of the practice was undoubted, that he felt impelled to express his views, and, so far as he could to give reasons why

he agreed with those who considered that they possessed in a simple procedure an invaluable therapeutic agency. He thanked the members for the great interest they had shown and the practical remarks made on the subject he had chosen.

Mr. CHARLES WALL, L.D.S.I., read a paper on

Improvements in Obturators for Cleft Palates.

Mr. PRESIDENT AND GENTLEMEN,—The paper I purpose bringing before you this evening is on the subject of Cleft Palates, and the instruments for remedying such defects, together with what I deem an improvement in obturators to close the unnatural openings in the soft palate, and in doing so I will not further remark upon the uselessness—sometimes—of the surgical operation of staphyloraphy, than to remind you of the recorded and admitted failures,* where nothing beneficial was achieved, even from long and skilful operations, though followed by patient attendance; and in making this comment I do not want to detract from those well-meaning surgeons who operated; but it is evident that had the competent dentist in such cases been consulted, much labour, anxiety, and chagrin to the surgeon would have been obviated, and loss and suffering to the disappointed, if not despairing, patient.

I trust the day is near when the educated dentist's opinion and services will be more sought—not alone in connection with hospitals and such institutions, but by all physicians—now that it has become obvious that the general health is influenced by the state of the mouth, and that the aid of *both* the physician and dentist *in conjunction* can only assuage, if not give permanent relief in many cases of constitutional disarrangement.

It is not without some diffidence, I venture to assert, that the apparatus I introduce to your Association is new, remembering that the civilised world regarded Harvey as the first discoverer of the circulation of the blood,† when history proves it was known to Irish physicians long before his time. But Solomon says "There is no new thing under the sun." However, I have searched dental literature, and have found descriptions of obturators of different designs for replacing the velum or soft palate. Salter recom-

* Richardson's "Mechanical Dentistry," page 394.

† Whitelaw's "History of Dublin," vol. ii.

mends such an instrument to be made in parts rather than attached, the artificial velum to be moveable by the aid of a recoiling spring. George Parkinson used hard rubber for the velum joined by a hinge to the palate accompanied by an elastic coil spring. Mr. Sercombe, of London, used common sheet rubber for artificial velum, sewn with thread of silk or wire to a hard palate plate. This sheet rubber gets most disagreeable and has to be changed frequently, besides, as flat sheet rubber badly represents the curved velum lost, this obturator gives but poor satisfaction. I have seen obturators for cleft of the hard and soft palate, all made in one piece of hard rubber. No doubt the wearers spoke much better than without them, but only for a short time—soon tiring—and then on examining the muscles, where the obturator rested at its posterior parts—inflammation could be observed. One of these patients informed me that he longed for his office hours to be over, so as he could return home and remove his mouthpiece. Harris mentions obturators made in two parts joined by a hinge, and flanged or winged at a portion that is to replace the lost parts of the velum, for the purpose of sustaining it in position, thereby putting material and weight where it never had been, encumbering and clogging the nasal cavity—consequently modifying vocal vibration. There must be trouble in inserting and removing it, and if not made with great precision a possibility of enlarging the cleft, as demonstrated by the use of the primitive obturator for cleft of the hard palate, *i.e.*, a cork.

I find Dr. A. Baker,* of Boston College, America, commending Dr. Kingsley for his modification of Stearn's obturators (neither of which are made of one piece), and as an improvement, advocates the use of hard rubber, gold, or platinum to substitute the velum, giving as his reason: "If soft vulcanised rubber for artificial velum would resist the fluids of the mouth, and not go through a process of decay and roll out of shape, it would be all that could be desired. This," he adds, "is impossible." In my research I have not discovered a description of an obturator like this:—All made of one piece, so impregnable to liquids. Cleanly in use and simple in construction, having no parts flanged or winged, hinges nor springs, consequently not liable to become disarranged, clog the nasal cavity, or give undue or varied pressure to the soft muscular parts it has to come in contact with.

* *Dental Cosmos*, 1881, page 183.

This instrument has been made over fifteen months, and it has not in any way deteriorated nor appears as if it would become so. Since then I had not seen my patient for whom I made it until this month, when I thought of reading this paper. Then he informed me, "He had worn the obturator since I gave it to him, and it had not hurt nor inconvenienced him in the least, enabling him to masticate, swallow, and speak with comfort and clearness, which, without it, he could but imperfectly accomplish and then only by making great contortion.

You will observe that the hard portion or suction plate where the teeth are fixed, though having to support the artificial velum, has not any wires, or other attachment to retain it to the mouth by clasping the natural teeth (which so often cause their loss), nor are there any springs, air chambers, valves, disk or other like adjunct, all of which, though so generally used, I fail to see the necessity of for suction plates. Indeed, Harris remarks "That vacuum chambers are injurious, and are used to temporally stick myriads of slovenly made pieces to the mouth." This remark in such cases I consider equally applies to the valves, &c., I allude to.

Likewise, note the artificial uvula (I may explain that I made two obturators for this patient). First, one without a uvula which he wore, then a few days afterwards another, as a duplicate in case of accident to the first. To this I added the uvula, which pleased so much that he has always since worn it in preference. Of course this improved artificial velum and the method of attachment is adaptable for congenital as well as accidental cleft palates. The length of this obturator is three inches six-eighths, covering all the hard and soft palate, and has five teeth at the back and uvula, all not weighing half an ounce.

Mr. BOOTH-PEARSALL congratulated the branch on the practical nature of the communication, and the ingenious way the case had been treated by Mr. Wall. The restitution of the voice was not difficult in a case like the one before the branch, as it was an acquired lesion, not a congenital one.

Dr. STACK spoke of the difficulty of treating congenital cases as compared with acquired, and congratulated Mr. Wall on his successful case, although the soft vela in no way reproduced the physiological action of the natural one lost from disease in the case before this branch.

Mr. WALL having replied,

Mr. W. BOOTH-PEARSALL, hon. sec., read his paper on

The Dentists' Register in Ireland in 1879 and 1887.

NEARLY ten years ago, "An Act to amend the law relating to dental practitioners," commonly called the Dentists Act, 1878, received the royal assent, and this Act has been a subject of endless discussions, not only with dentists, good, bad, and indifferent, but has figured largely in the costly debates of the General Medical Council. It will not be out of place, on this the second meeting of the Irish Branch, to bring before the members of my profession for consideration, one of the important provisions of the Act, namely, the publication of the Dentists' Register, and how far it has affected us as a profession in Ireland. The principle of the Act is the provision for public use of a large number of competent dentists, and to the General Medical Council—the highest medical authority of the kingdom—is entrusted the care and maintenance of dental education. Before the passing of the Dentists Act, our profession was practised without let or hindrance by any one who thought fit "to pick it up," whether they possessed any competent knowledge or not. The more enterprising and educated dentists sought such competent knowledge as they could get by private teaching, and the attainment by examination of licences in surgery or medicine. Men of this type were thoroughly endowed with a professional and honourable spirit, while those who, unhappily for themselves, did not possess any education, permitted the practice of what ought to have been a profession, to degenerate into a trade. Now it is our duty to see the provisions of this Act carried out. First, by constant attention to the state of the Register. Second, by remonstrances addressed to those who have not placed their names on the Register in compliance with the terms of the Act. Third, by watchful care, that unqualified persons are not permitted to practise.

As you all know, for some years past no further names can be placed on the Register, except those qualified by study, and the strict fulfilment of the terms of the dental curriculum lasting four years; the knowledge gained during these years of study and pupilage being severely tested by examining boards before the dental candidate can practise on the public.

As you are all aware, the Dentists' Register is now under process of revision, and it has fallen to my lot as your hon. sec. to take considerable trouble in the correction of the names placed

on the Register as in practice in Ireland. In this troublesome and unpleasant duty, I have been aided by some of our members, notably, Mr. O'Duffy, and I think we may look forward to seeing several important corrections in the new Register. Having by actual participation in the labours of the more active and earnest members of the British Dental Association (especially Mr. W. H. Waite, by whose steady energy and force of character the revision now in progress has been brought about), become deeply interested in the condition of the Register, I thought I might interest the branch in the matter, so that if each member does *his* part, and acts in sympathy with the earnest and able men who carry on the great work of the Association, we may within a few years look upon a Register that will worthily and truthfully represent our profession. It has been my lot already, since I entered upon the anxious and laborious duties of hon. sec. to our branch, to receive many communications from members, complaining that various things have not been done "to put down advertising," to prosecute offenders under the Act, and other pleasant duties; but when I ask the aggrieved member to supply me with the legal proofs of these irregularities, so that the matter can be placed in the hands of the parent Association in London, I am sorry to say the matter is allowed to remain as it was. Now, in several instances, I have taken pains to find out how these offenders can be made to comply with the Dentists Act, but only to be left without exact information or proof needed for legal demonstration, while the practitioner complaining about the infringements in the first instance, cries out that it is no affair of his to bother about. Now I say emphatically and earnestly, that it *is* the duty of every man in this branch to help, so far as he can, the Dentists Act to be a reality, and not a mockery, and by loyal service render help to the men who have in the highest sense of duty undertaken the labour, the worry, the loss of leisure that the consolidation and elevation of our profession involves. The way to do this is to further the publication of an accurate register. It has been a matter of considerable thought, how best I can place before you in an emphatic way the result of many hours spent in the study of the Dentists' Register—and, if I succeed in giving you the same vivid impression of our profession as a whole, as well as in its component parts, I have obtained for myself, by the construction of some tables and charts, I do not think the time spent on them has been lost.

In the Dentists' Register of 1879, will be found 140 names

distributed as follows:—Armagh, 1; Athlone, 1; Athy, 1; Belfast, 22; Carlow, 1; Carrickmacross, 1; Clonmel, 2; Clones, 1; Coleraine, 1; Cork, 16; Dublin, 67; Dungiven, 2; Dungarven, 1; Hollywood, 1; Kilkenny, 4; Leterkenny, 1; Limerick, 2; Londonderry, 5; Naas, 2; Newry, 1; Omagh, 1; Waterford, 3; Wexford, 3.

1879.	On Medical Register.	In practice with Medicine and Surgery. Medical Surgery.	L.D.S.	In practice with Pharmacy.	Dentists in practice, 22nd July, 1878.
Armagh	1	—	—	—	1
Athlone	1	—	—	1	—
Athy	1	—	—	1	—
Belfast	22	2	2	—	18
Carlow	1	—	—	—	1
Carrickmacross	1	—	—	1	—
Clonmel	2	—	—	1	1
Clones	1	—	—	1	—
Coleraine ..	1	—	—	—	1
Cork	16	—	3	1	12
Dublin	67	7	9	6	45
Dungiven	2	1	—	1	—
Dungarven	1	—	—	—	1
Hollywood	1	—	—	1	—
Kilkenny	4	—	—	2	2
Leterkenny	1	—	—	1	—
Limerick	2	—	1	—	1
Londonderry	5	—	1	—	4
Naas	2	1	—	1	—
Newry	1	—	—	1	—
Omagh	1	—	—	1	—
Waterford	3	—	2	—	1
Wexford	3	1	—	1	1
140	10	5	18	21	89

4 names of Dentists are in Medical Register alone.

If to these we add in the names of four dentists on the Medical Register, we find that the dental wants of nearly five millions of people were relieved by 144 dentists in 1879. It will be of interest to know what are the educated qualifications of the dentists on the Register for 1879. We will find in the Medical Register twelve names practising as dentists, distributed as follows:—Dublin, 7; Wexford, 1; Naas, 1; Dungiven, 1; Belfast, 2. Registered as in practice with pharmacy, we find twenty-one names: Athlone, 1; Athy, 1; Carrickmacross, 1; Clonmel, 1;

Clones, 1; Cork, 1; Dublin, 6; Dungiven, 1; Hollywood, 1; Kilkenny, 2; Letterkenny, 1; Naas, 1; Newry, 1; Omagh, 1; Wexford, 1.

1887.	On Medical Register.	In practice with Medicine and Surgery. Medical Surgery.	L.D.S.	In practice with Pharmacy.	Dentists in practice, and July, 1878.	Irish branch of B.D.A.
Armagh	1	—	1	—	—	—
Athlone	1	—	—	1	—	—
Athy	1	—	—	1	—	—
Belfast.....	18	1	4	1	12	11
Carlow	1	—	—	—	1	—
Carrickmacross	1	—	—	1	—	—
Clonmel	2	—	—	1	1	—
Clones.....	1	—	—	1	—	—
Cork	13	—	1	1	11	5
Dublin	66	9	16	3	38	25
Dungarven.....	—	—	—	1	—	—
Dungiven	2	1	—	1	—	—
Kilkenny	2	—	1	1	—	—
Killylea	1	—	—	1	—	—
Killinchy	1	—	—	1	—	—
Letterkenny	1	—	—	1	—	—
Limerick	3	—	1	—	2	1
Londonderry	4	—	3	—	1	—
Naas	2	1	1	1	—	—
Newry.....	2	—	—	1	1	—
Maynooth	1	1	—	—	—	—
Omagh	1	—	—	1	—	—
Portadown	1	—	—	—	1	—
Sligo	1	—	—	—	1	1
Waterford	2	—	2	—	—	1
Wexford	3	1	1	1	—	1
132	14	5	30	20	69	45

3 names of dentists practising are in Medical Register alone.

12 L.D.S. degrees in Ireland not on Register with names of holders.

2 L.D.S. not in Dentists' Register at all.

Registered as in practice with medicine and surgery, we have Dungiven, 1; Kilmeague Naas 1. Registered as in practice with medicine—Dublin, 1; Wexford, 1; both practitioners with shops. In practice with surgery—Dublin, 2; one was F.R.C.S.I., the other no qualification whatever, and is now after nearly ten years modestly content with the L.D.S. diploma, *sine curriculum*.

Registered as in practice with the L.D.S. qualification, we have 18 names: Belfast, 2; Cork, 3; Dublin, 9; Limerick, 1; Lon-

donderry, 1; Waterford 2; 6 of whom have since died; of the 18 mentioned in the 1879 Register, 7 were without any diploma the previous year. Of those registered, as in practice with pharmacy, we have persons we would never recognise as models of operative skill in dentistry; 9 of these, however, have passed the moderate examination exacted in 1877, by the Pharmaceutical Society of Ireland; of the rest, only three or four fail to shew, so far as I can ascertain, any indication that they started in life with any greater literary impedimenta than the three R's.

I have to account for the residue, 87 names of dentists, as in practice before July 22nd, 1878, for unlike the chemists and some other impostors whose names are on the Medical Register, most of this class were really practising as dentists, or as dentists' assistants throughout the country, and in later years they eagerly seized the opportunity granted to them in the years of grace of the licensing bodies of proving, by submitting to test of a practical and searching examination, their desire to become recognised as genuine practitioners. In many instances I have reason to know that this laudable effort to improve their professional position was accompanied by an immediate loss of income, by having to abstain from modes of attracting practice now generally reprobated by all the best men in our profession, but to the honour of the holders of the diploma, *sine curriculo*, the stringent regulations of the Royal College of Surgeons in Ireland were obeyed by the great mass of those who obtained this diploma, only one or two individuals practising in Ireland having to be "cautioned" by the president and council. It would be somewhat tedious to enter minutely into each Register after 1879, 1881, 1882, 1883, 1884, 1885, 1886, till we come to that of last year, as we are perhaps on the eve of the publication of the most accurate Register of the series; certainly the most accurate, if the information, and zealous voluntary assistance has been made use of at head quarters, that has been placed at the disposal of the Registrar for months past.

In the Register of 1887, we have 132 names, 8 less than the total I gave you for 1879, and they may be classified in the same way. Dentists whose names appear on the Medical Register number 14, Belfast, 1; Dungiven, 1; Naas, 1; Maynooth, 1; Wexford, 1. In practice with medicine and surgery we have 2; Naas, 1; Dungiven, 1. In practice with medicine, Wexford, 1. In practice with surgery, Dublin, 2; one of whom has secured

the L.D.S. diploma *sine curriculum*. The number of dentists holding the L.D.S. diploma, has risen in this year, from 18 in 1879 to 30 in 1887, and if the holders of this qualification did their duty to their profession and obeyed the law as laid down in the Dentists Act (I see several of them in the room), the 30 would swell to 41; if we add in an L.D.S. in Limerick and one in Dublin, not in the Dentists' Register, but given in Churchill's list, we might make the number 43. This increase of number in the holders of the L.D.S., shews a wonderful change in the *personnel* of the profession, the greater number of the L.D.S. diplomates being subject to the stringent regulations of the college in which we meet to-night.

Those registered as in practice with pharmacy have fallen to 20 in 1887, as contrasted with 21 in 1879, and of this residue, the new Register will shew a still greater diminution. It is only just to mention that 11 out of the 20 have gained the licence of the Pharmaceutical Society of Ireland, an examination that is now a formidable test of competency in the practice and art of pharmacy. I think I have shewn a state of progress in our profession impossible under the conditions that preceded the passing of the Dentists Act, and we should all gratefully remember the exertions made on behalf of the professional status and education of the members of our profession by Sydney Wormald, W. H. Waite, Sir John Tomes, J. Smith Turner, and Sir John Lubbock. You will be able to see on the maps I have prepared, the geographical distribution of our profession in Ireland, the greater number of practitioners residing on the east and north coast of the island, only one practitioner residing on the west, and I have simply to mention that the dentists as in practice before July 22nd, 1878, have dropped from 87 in 1879 to 72 in 1887. We may after looking at the Register in this minute and searching way congratulate ourselves that the record is as good as it is, and that so far as I have been able to discover by direct enquiry from many sources, we have never been honoured by the patronage of the hair dressers, the blacksmiths or the tobacconists who made themselves so painfully *de trop* in England, and figured largely in the volcanic debates of the General Medical Council. I hope I have said to-night what will arouse your interest, your aid, and your determination, that the powers of the Dentists Act will be firmly carried out in Ireland, and nothing is more calculated to inspire offenders with a wholesome dread of its provisions than to know that we

have in the British Dental Association an organisation skilled and disciplined for the purpose. There is little doubt that the gentle hand of time will deal with the present generation of registered dentists in the same way as the men who were placed on the Medical Register as in practice before 1815, whose names have vanished from the Register from time to time, till the Medical Register has become, by the list of diplomas and degrees conferred by curriculum and examination a list of qualified medical men our country may well be proud of.

The PRESIDENT, after complimenting the hon. secretary on the masterly and intimate knowledge he had shown in dealing with a very dry subject, and his enthusiasm in interesting all present by the attractive illustrations of the profession as seen in the maps, called on Mr. W. H. Waite, of Liverpool, to open the discussion.

Mr. WAITE, who spoke at some length, dwelt on the necessity of voluntary effort in the revision of the Dentists' Register, and of the interest aroused in so important a matter. He spoke very favourably on the prompt and business-like action of the Irish and Scotch Registrars-General, and hoped that the English Registrar-General would work in the same direction as indicated by the Act of Parliament. Mr. Waite was listened to with great attention, and at the conclusion of his earnest and sensible remarks was warmly applauded.

Dr. STACK asked permission to defer his communication on "A Fractured Incisor" till the next meeting, owing to the want of sufficient light to see the microscopic sections he had prepared.

The PRESIDENT of the branch showed "casts of a perforated palate" of great interest, as showing how rapidly the absorption increased when any operation in the palate was "plugged," in this case with soft paper by his patent. The hon. secretary showed a "set of teeth of native work from Japan," he had received from a friend out there.

Mr. W. H. WAITE showed Flagg's "dry heat gutta percha warmer," and explained the use of the different grades of gutta percha and the decks on the dry heat warmer.

The proceedings terminated with a vote of thanks to the president.

Midland Branch.

A meeting of the members and associates of the Midland branch was held in the Philosophical Museum, Leeds, on Saturday evening, February 4th, when the following gentlemen were present:—G. Brunton, J. C. Storey, T. E. King, I. Renshaw, J. L. Pike, W. E. Harding, S. Wormald, T. Murphy, F. D. Walker, G. H. Lodge, C. A. Barstow, W. Taylor, A. B. Wolfenden, G. B. Hilman, C. Rippon, F. E. Garner, E. Cowper, J. A. Fothergill, J. N. Manton, K. McAlpin, W. Simms, G. N. Skipp, J. M. Nichol, J. H. Carter, W. A. Turner, T. B. Barnby, J. W. Senior, J. G. Wallis, R. Edwards, E. Houghton, W. Dykes, J. T. Hughes, A. M. Matthews, A. A. Matthews, A. G. Rayner, W. G. Jones, A. Cocker, W. Headridge, T. Headridge, L. Matheson, G. G. Campion, E. J. Ladmore, W. H. Nichol, M. Johnson, J. Spotswood, A. Howarth, F. Harrison, W. Glaisby, G. H. Osborn, J. E. Greaves, W. H. Waite, and F. Bullin (in the chair).

The PRESIDENT (F. Bullin, Esq.) opened the meeting by saying:—

Gentlemen,—I am here to-day to report myself as one of the soldiers of the Midland section of the dental army, who have survived the actions that have been fought since we were encamped under the walls of the castle of Lancaster.

Being conscious of the fact that I am on short service (for I hold my commission by your favour, as one of your officers, for one year only), I have honestly endeavoured to make the best use of my time, and stand before you now with the full conviction that although the battle for our rightful position as an ancient and honourable profession is not yet over, we have, by going forward fearlessly with the sword of truth, made some considerable advances towards the goal of our righteous ambition.

A detailed account of one victory to which I refer, has been sent to the editor of our Journal to-day for publication, therefore I need not here explain the mode of honourable warfare adopted. It will be sufficient to say that you have only to convince the laity of any hospital of our importance as a profession, and the honorary dental surgeon will be at once recognised upon the surgical staff or the Board of Management, on a par with any M.R.C.S. or M.D.

After referring to the question that had been raised as to the propriety of an L.D.S. administering nitrous oxide gas, the speaker

proceeded to say :—Meanwhile there is food for reflection upon our present false position, and the best means of liberating ourselves from it. We may usefully employ our time in examining the title deeds of the dental family. Depend upon it there is a flaw in the title, and we must assert our legal rights.

In the battle we are fighting, I see the words DENTAL COUNCIL legibly inscribed on our banner, and the British Dental Association with a solid united front, pressing forward for its inherent right to manage the affairs of the dental profession.

Personally, I assure you, gentlemen, I have not the least feeling of ill-will towards those in the metropolis, with the L.D.S. and M.R.C.S. degrees (not even to Thersites), who invite us all to become general surgeons as the only antidote for our woes. I hope every one of our misguided brethren will see the error of his proud ways, and join his more enlightened L.D.S., M.R.C.S., and other brethren in the provinces, in demanding of the Legislature a dental council, selected from the British Dental Association, to manage dental affairs.

The number of our recruits is increasing, and we are gaining the sympathy of the more enlightened portion of the medical men. Everything is going in our favour. *Vires acquirit cundo*, and we appeal to our London brethren to join us in the fray. Their country brethren have thrown off the "fustian" of advertising, and have put on the "broad-cloth" of the reputable practitioner, and are waiting for the L.D.S., M.R.C.S., to join them in securing a dental council, in view of future legislation, for the suppression of fraudulent "dental institutes," which are springing up in so many large towns, and have already affected the income of more than one L.D.S., M.R.C.S., in London. We shall not be deterred by any opposition arising from professional pride, but would prefer that all should shortly join in the shout of victory.

Mr. W. E. HARDING, of Shrewsbury, gave a very interesting account of his visit to the United States on the occasion of the International Medical Congress.* He also shewed models representing a simple method of correcting a case of irregularity by means of piano-wire.

Mr. T. E. KING, of York, explained his method of mounting continuous gum teeth, by the "Cumming process," and shewed specimens.

* Mr. Harding's paper will appear in our March Number.

Mr. BRUNTON exhibited an improved hand-piece for the dental engine, devised by Mr. St. George Elliott, also an ingeniously constructed instrument drawer.

The President having to leave the meeting at this point, Mr. A. M. MATTHEWS, Vice-President, took the chair. He called upon Mr. Waite to give an account of the working of the scheme formulated at the Lancaster meeting of the branch, appointing responsible representatives in various centres, to assist in the revision of the Dentists' Register.

Mr. WAITE then reported that the scheme had worked admirably, a large amount of information having been afforded which could not have been obtained in any other way. He announced a considerable accession to the membership of the branch, and urged the importance of individual effort to enlarge the influence of the Association. He gave some details in reference to the annual meeting which will be held in York the latter end of May. He further announced that active preparations were being made by the Irish Branch, for the Annual General Meeting of the Association in Dublin next August. He invited the licentiates of the Irish college to make a point of attending that meeting, and assured the members generally that a very hearty reception indeed was awaiting them across St. George's Channel.

Mr. RENSHAW congratulated the meeting upon Mr. Waite's statement, and spoke in very high terms of praise of the energy and completeness with which the reforms had been carried out.

Mr. A. B. WOLFENDEN, Halifax, stated that he had been requested by the Dentists of Halifax to state to the meeting that there was a case of evasion of the Dentists Act by a person in that town, and after giving the particulars, he urged that it was a case which might possibly be taken up by the British Dental Association, and to test the feeling of the meeting, he moved a resolution that the matter be laid before the Representative Board. This was seconded by Mr. COCKER, of Halifax, and supported by Mr. HOWARTH, of Bradford.

Mr. NICHOL, Leeds, and Mr. A. M. MATTHEWS, Bradford, having spoken deprecating the policy of undertaking prosecutions such as the one proposed, the resolution, having been put to the meeting, was carried.

A vote of thanks to Mr. Matthews for presiding, brought a most successful meeting to a close.

At a council meeting held the same day, the following gentle-

men were elected, viz., to the British Dental Association and Midland Branch :—Messrs. J. G. Sherwood, R. E. Harrison, Thomas Nottingham, J. G. Wallis, Thomas Audas, all of Hull. To the British Dental Association : G. Cooksey, Preston. To the Midland Branch : J. W. Dent, Stockton-on-Tees, K. W. McAlpin, Leeds.

To the Members of the Midland Branch of the British Dental Association.

GENTLEMEN,—Dental reformers must feel grateful to the Publishing Committee for the contents of the January number of our Journal, containing, as it does, a mass of evidence in favour of the cause we have espoused. The long-looked-for letter of Mr. Sewill has appeared, occupying seven and a half pages of our Journal, and two anonymous letters, all of which I will reply to in due time, but not in the pages of our Journal ; for being only an L.D.S.Eng., so aptly described as belonging only to the “Fragment of a Profession,” *i.e.* one of many, who constitute no profession at all, I will not presume to ask for so much space, but will forward you a letter by post, as before.

“Who speaks not needful truth, lest it offend,
Hath spared himself, but sacrificed his friend.”

I now leave this branch of the subject for the present, feeling sure that my Midland brethren will not mistake earnestness for “temper,” and proceed to narrate, as briefly as I can, circumstances, as illustrating and verifying one “charge” in my defence, against the majority of the medical body, which has been denounced by M.R.C.S. writers in our Journal as “untrue.” It relates to a victory recently achieved by your president and hon. secretary, in your name, securing his rightful position, for the future, to the hon. dental surgeon, in an important provincial hospital.

The Chester General Infirmary is a fine building, standing in its own grounds of several acres. It is the only hospital in the City, and so jealous are the citizens and its county supporters of its efficient working amongst the suffering poor, that no rival institution or dispensary of any kind would find the least support. It enjoys the advantage of a lady superintendent, and a staff of lady nurses, a resident house surgeon, and assistant house surgeon ; and, down to January 31st of this year, the honorary staff consisted of one honorary consulting physician, three honorary physicians, three honorary surgeons, and one ophthalmic surgeon.

These medical and surgical officers (with the exception of the honorary consulting physician), occupy seats, as ex-officio governors, on the Board of Management, together with twenty-one elected governors, from the city and county, in certain proportion.

From the foundation of the hospital there has been an honorary dental surgeon attending twice a week, and whenever required, the average number of his patients being 1,200 annually, thus giving the institution the manifest advantage of his skill and experience in his specialism of surgery, but without the privilege of a seat on the Board.

In 1861 your president was appointed to that office, and naturally enquired of the then secretary (who was to the Infirmary what Edmund Balfour was, in years gone by, to the College in Lincoln's Inn Fields), why the honorary dental surgeon had not a seat on the Board. He very courteously explained that the relations between the laity and the medicals were frequently strained, and he felt assured that the former would not willingly consent to the L.D.S. having a seat on the Board, which would probably weaken their position by one vote.

Your president, thinking it beneath the dignity of an L.D.S. Eng.—at that time the only dental qualification in the United Kingdom—to go, cap in hand, begging for a seat on the Board, continued his duties, naturally thinking from time to time, during a long quarter of a century's arduous service, that the medicals, knowing that his name was inscribed as a specialist in surgery on the roll of the Royal College of Surgeons of England, would surely unsolicited make an effort to do justice to his diploma, his office, and his services, and accord him the rightful position he knew he could obtain at the hands of the laity. Time rolled on, and he had the mortification to find that it was a case of "Save me from my friends;" in fact that the objection and opposition rested with the medicals.

Some years before he retired from his office he made up his mind, that when no longer eligible for a seat on the Board, by reason of his acceptance of the office of honorary *consulting* dental surgeon, he would defy the medicals, and claim from the laity, not as a favour, but as a right, a seat on the Board for his successors for all time. He resigned the position of honorary dental surgeon at the annual meeting, January, 1887. Instead of calling a special general meeting to appoint his successor, as the rules of the hospital require, the Board requested him to continue his duties for another year. His junior partner, Mr. M. Johnson, volunteered his services, which were accepted.

Your president selected the auspicious year of Jubilee to attack the stronghold of medical prejudice, on behalf of the L.D.S. diploma. He now solicited an interview with the noble president of the Infirmary, His Grace the Duke of Westminster, K.G., which was very graciously granted; and on Bank Holiday, December 26th, 1887, in company with your indefatigable and worthy secretary, Dr. Waite, he had the honour and privilege to lay before His Grace, as president of the Infirmary, a statement of facts bearing upon the point at issue.

His Grace evinced the greatest interest in the subject ; asked many questions as to the Dentists Act, the Register, &c., &c. The interview lasted an hour, at the conclusion of which your president took the liberty to say, " This is our position to-day, when on behalf of the Midland Branch of the British Dental Association, we ask the laity of the Infirmary, of which your Grace is the head, to rescue my successors, for all time, from the subordinate position I have held for a quarter of a century, but which no capable man from this time will submit to for any length of time, and I have every confidence in the result of our appeal."

The deputation then retired, having convinced His Grace of the justice of their cause, and received an assurance of support.

On the evening of the same day your president had an hour's interview with Colonel E—— L——, an active member of the Infirmary Board, at his town residence in Chester, and convinced him of the right of the cause he advocated, and the Colonel cheerfully promised to propose the necessary alteration of rules at the Board meeting on January 3rd, 1888. At that meeting an unusual number of Governors was present. The Colonel earnestly proposed the alteration of rules, in terms suggested by the deputation. His Grace the president calmly and firmly seconded and supported the motion.

As it was anticipated, an active F.R.C.S., representing the majority of his class, spoke against the proposed alteration ; but a lay governor very properly reminded him that " the medicals were not the Board."

The motion was put to the meeting, when only three held up their hands against it : one an F.R.C.S., one an M.D., and one a youthful M.R.C.S., exalted, about two years ago, to the high position of ophthalmic specialist. Not one of the laity held up a hand against what was manifestly an act of justice (too long deferred) to the hon. dental surgeon. The decision was received with acclamation, for it was a triumph over professional pride, not unmixed with impertinence.

The veteran chairman of the Board, Colonel H——, being unable to attend through indisposition, wrote to express his delight at the dental success.

It is only fair here to say that the whole medical staff did not participate in the opposition. *Ab uno disce omnes* did not apply on this occasion. The senior hon. physician, much to his honour, unsolicited, voted in favour of the dental surgeon, and another eminent physician, enjoying a large practice here, being unable to attend the Board, wrote to Colonel E—— L—— the following letter, with permission to read it at the meeting. He has also kindly permitted your president to publish it in this statement :—

" Northgate House, Chester,

" January 2nd, 1888.

" MY DEAR COLONEL,—I have thought over what you have written to me about the dental surgeon. I quite agree with your views on both

the points. There should be a change in the rules. The dental profession now ranks as a learned profession. The Queen's dentist, Sir Edwin Saunders, has been very properly and deservedly knighted, and Tomes also : and many other London and provincial dental surgeons are scientific men of the first class. I have been told, on very good authority, that the average men now entering the dental profession are of a very high class, and that it costs more in time and money to obtain a good dental qualification than to become a member of the College of Surgeons of London. I think that dental surgeons, who do not advertise, should be regarded as brethren, and treated by us as equals. I therefore agree with you in thinking that the dental surgeon to the Chester Infirmary should have all the privileges granted to the honorary staff, and certainly have a representative seat on the Board of Managers.

" Ever sincerely yours,

" W. M. DOBIE."

At the annual meeting of the governors of the Chester General Infirmary, held in the Town Hall, Chester, on Tuesday, January 31st, 1888, His Grace the Duke of Westminster, K.G., in the chair, an addition to rule 21, giving the hon. dental surgeon a seat on the Board of Management, was carried unanimously.

Neither the medical writer of the foregoing letter, nor any member of the staff of the infirmary, was canvassed by your president (or any dental friends), as he was determined to watch the case fought out on its own merits, with the result that would and must occur in other parts of the country, if the L.D.S. hon. surgeons are not too apathetic to move in the matter as they ought to do, in the interests of the *cum curriculo* men, who will in time follow them.

Thus "my story is ended." I am told in the Journal that I am "fond of stories." I plead guilty to the charge of liking *true* stories ; and I have many more to tell before I have done with my M.R.C.S. assailants, and have taught them a few truths they appear unwilling to learn.

I am, fraternally yours,

February 4th, 1888.

FRED. BULLIN.

WE are desired to state that the Athletic Club of the Dental Hospital of London, have arranged for a dinner on Thursday, March 8th, at the Holborn Restaurant. Sir Edwin Saunders has consented to preside at the gathering, which will be representative in character, and will doubtless include all those who take an interest in the sports which the Club exists to encourage.

ORIGINAL COMMUNICATIONS.

Medical Congress, Washington, 1887.—Dental Section.

By JOSEPH WALKER, M.D.

I HAVE great pleasure in testifying to the success of the dental section of the Medical Congress.

The attendance of members of this section was far above the average attendance of other sections. Although many of the well-known practitioners were absent, yet sufficient interest was excited by members present to render the meeting instructive and profitable. Papers were read and illustrated of deep scientific research; new operations explained and performed, the success of which must be tested by time, the theory on which they rest being in some instances scarcely in accordance with, if not directly opposed to, the old teachings of surgery, physiology, and pathology.

The success of the dental section was not so complete as many of my American friends desired. Various reasons may be assigned in explanation. The first I will mention is "The constitution of the United States." For example, whilst all the States acknowledge obedience to the Central authority, yet each State seems to possess its own peculiar and distinctive code of laws, such laws being entirely inoperative beyond the area of the particular State in which they were framed.

This independent action of each State shuts out the possibility of one standard of preliminary education being adopted throughout the whole length and breadth of the States, prior to professional education. No examination in arts can be accepted by all the States, except by arrangement with each State Legislature.

The State Legislature grant facilities for combination unknown in this country. Professional men can, by *petition*, obtain legal powers to establish a college, legal, medical or dental—a college with legal powers to educate, to examine, and grant degrees; the staff of such college holding in their own hands, the power to regulate the period of study, the curriculum, the standard of examination, the character of degree granted. Hence the large number of dental colleges in America; which are fast increasing. In one city I visited I found five dental colleges already in existence.

I fear this competition must in the smaller schools affect the

high standard attained by a few of the best institutions. A second reason may be found in the character of the dental curriculum, a curriculum of two years' duration ; only a nominal guarantee of early classical education on admission to professional studies ; the lack of general registration of the student on entrance to a dental college ; the want of affiliation of the dental college to a medical hospital and school. The dental student in the American curriculum obtains no general medical or surgical clinical teaching, nor is there any well considered organised plan of medical clinical instruction ; no tutorial instruction at the bed-side of the patient ; in fact, the dental student is never associated or educated with the general medical and surgical student at a general medical and surgical hospital. The examinations are conducted by the teachers of the dental colleges. The degree of D.D.S. is also conferred by the same staff of teachers. There is no interchange of teachers of the various colleges to form an independent examining board. These facts are known to the medical world of America, and must influence the position of the dental section at a medical congress.

A dental college and hospital is generally located in one large building of two flats. The upper flat is devoted to operative dental surgery ; the lower flat is divided into sub-divisions, chemical laboratory, mechanical laboratory, dissecting room, lecture theatre, class rooms ; this arrangement minimises the labour of supervision. The dental hospitals are open from nine to five or six o'clock. Patients are admitted of every class without reservation. No questions are permitted by the authorities as to the circumstances of the applicant. A fee is charged for gold stopping, equal to the value of the gold leaf. For the regulation of irregular teeth or adjustment of malformation of the maxilla, a fee is fixed for treatment and necessary mechanical appliance by the surgeon of the day. Artificial dentures of every description are prepared and adjusted for any applicant. The surgeon of the day or his representative advises the necessary treatment. A fee, honourable in character is proposed, and if within the means of the patient, is accepted. The student most capable to carry through the preparation of the denture and final adjustment, is nominated to take charge of the case under the supervision and direction of the senior staff demonstrator of mechanical dentistry. The fee paid to and received by the secretary.

In the mechanical laboratory, benches are arranged with

drawers, pins and lockers, equal to the number of students in daily attendance ; in the larger schools a locker, drawers and pin is allotted to every two students. The work is so arranged that half the day is allotted to each student. The modelling in plaster, sand and metal, the furnaces for smelting and melting metals, purifying gold, the furnaces for continuous gum work, are arranged in a distinct arbitrary division of the laboratory. The making gold dentures, mounting teeth and fine adjustments in the opposite end of the laboratory, so that a clear and general supervision can be obtained by one dental officer.

In one of the best organised colleges, a senior dental surgeon is in attendance at the hospital from nine a.m. to five p.m. Great self-denial is shewn by this teacher, who possesses a full appreciation of what is required to make a dental hospital and college efficient. He has resigned his own active practice into the hands of a *locum tenens* for six consecutive months. This senior dental officer gives a general supervision over the whole working staff, watching and serving the interests of patients, demonstrators and pupils.

In other dental schools a senior dental surgeon devotes either the morning or the afternoon to general instruction or supervision. The medical and surgical staff give their lectures in the same building, the prospectus is so arranged that the lectures fit in with the operative and mechanical hospital practice. The one great advantage to the dental student of America is, that all his studies are carried through in one building. The absolute freedom from any check in the admission of patients and subsequent dental relief in operation and mechanical treatment, must be open to much abuse, and interfere with the private practice of the junior dental surgeons.

In conclusion, I will ask my medical and dental friends in America, to accept my best thanks for their kindness and hospitality, for their unreserved confidence, for the interchange of thought, and practical illustrations of their dental operations in their private surgeries. In return, I hope they will allow me to offer, and afford me an opportunity of giving them similar good fellowship when they visit Great Britain.

Crown and Bridge Work.*

BY GERARD BLACK, L.D.S.I.

As a means of replacing natural teeth which have been lost the bridge work system has, in its proper place, so many advantages not to be found in the old method of carrying substituted teeth on plates, that those who have any lengthened experience in adapting it cannot fail to approve of and recommend it. Let me reiterate the phrase "in its proper place," for in this lies the pith of what follows:—My experience of bridge work—extending now over several years, in which it has been in constant use in my surgery—has taught me to believe it to be well worthy of a high place amongst the best forms of modern dentistry. It unfortunately often happens that the first attempt of an operator being unsuccessful he condemns the system without a further trial. Or, it may be, that meeting with favourable circumstances and (in spite of his inexperience) succeeding admirably, he forms too high an opinion of its powers, and as a consequence proceeds to use it, perhaps, in a case where it is inapplicable, when it of course fails, and causes trouble and dissatisfaction to his patient. Such cases as these, coming to the knowledge of other practitioners, deter them from attempting to bring the system into use amongst their patients, and condemning bridge work altogether because of one or two failures, they close their ears to reason and refuse to listen to the counsels of those who have *proved* it to be beneficial when properly applied in suitable cases. It is a matter for regret to find, too, that some of the older and therefore more influential members of our profession, in consequence, perhaps, of some such initial failure as those I have alluded to, or perhaps on purely theoretical grounds, use their power to condemn bridge work *in toto*; but when we remember that one of the greatest blessings ever conferred upon mankind, namely, the introduction of chloroform, was preached against from the very pulpits of the Church, we can excuse and forgive them. I myself do so the more readily, because I am convinced that Crown and Bridge work will, ere long, take its proper place throughout the profession as a thoroughly reliable and useful system, the practice of which is a distinct improvement upon that of many of the older methods. The chief object of this brief paper is not so much to bring under the notice of the student the mere technical details which he can have in the text books bearing on the subject, as to give him

* Read before the Edinburgh Dental Students' Society.

from personal experience some facts which will sustain him under possible failure at the outset in mastering this not-too-easily-acquired form of operation, and to show him that one of the secrets of success is in knowing when and where *not* to attempt its application.

In bridge work, the crowns being the only support, it naturally follows that upon them success entirely depends. It is, therefore, indispensable that their construction and application should be thoroughly understood before any bridge work is undertaken. Of crowns there are two classes used in bridge work, the plain metallic crown and that faced with porcelain. I shall first speak of the plain crown made entirely of gold, or any other suitable metal or combination of metals. They are sometimes constructed of platinum faced with gold, but I consider that 22 carat gold is the most suitable metal to use. The molar and bicuspid teeth are, as a rule, the only ones to which these crowns are applicable. As I do not intend to deal here with the treatment of the pulp or of an abscess which may perhaps exist, it will be inferred that the tooth of which I am about to describe the crowning has already gone through the necessary course of treatment, or that none was necessary.

In making his first crown the operator will probably not consider the time occupied with the patient in the chair, naturally preferring to have the mouth to refer to when in doubt; but after further experience he will find it advisable to do all that *can* be done, from a model, so that much time is saved, to the advantage both of patient and operator. The first step is to have a good model of the tooth, which in this instance we will suppose to be but partially decayed—not a general impression of the mouth, but one taken with a small ring or tube formed of german silver, or even card-board. This is filled with the modelling compound, and an accurate impression secured. Having now a good model of the tooth, the next procedure is to trim it as near as possible to the form it will have when prepared for the crown in the mouth. To this a band of coin gold is then fitted, about half as deep again as the length of the tooth, and carefully adapted to the festoon of the gum. Next a suitable top, to form the masticating surface of the crown, is struck up from one of the many dies which every operator in crown and bridge work must possess. The die plate and hub mould for making cap crowns, brought out by the S. S. White Co., is one of the best. The ring and top

having been prepared, we are now ready at the next visit of the patient to complete the crown.

The natural tooth must now be rendered of such a shape as to allow the ring (already fitted to the plaster model), to be so adjusted that it fits closely all round at the cervical edge, extending under the free margin of the gum about the sixteenth of an inch. This is done by means of a corundum wheel and points on the engine. Having been closely adjusted, it is marked in the mouth (generally on the buccal surface), where it overlaps, and on removal cut, and the edges levelled and brought together, fitting nicely, and soldered. The ring should be no thicker at the joining than at any other part. In this operation it should be made to tighten on the tooth by slightly narrowing the circle.

When trying the ring after soldering, it should be so tight as to require to be driven on with an ivory staff and a plugging hand-mallet. When this has been done, the ring is marked round on the inside with a sharp probe. Sufficient space will have been made by grinding down the masticating surface of the decayed tooth to leave room for the gold cap. The ring is now again taken out of the mouth, and trimmed down with sharp-pointed scissors nearly to the line marked, as described, and again fitted on the tooth.

There are now two ways in which this crown may be completed. If there is sufficient room between the ring and the antagonising teeth it will be easy to adapt the top to the ring, and it will be found that by the depression of a cusp or two, matters are greatly facilitated, though this is not always necessary. Having arranged the top in a satisfactory position on the ring, they are once more removed, the top filled with gold (rendering the cusps solid), and soldered on. Some taste may be displayed in filing up the crown so as to give it a natural shape, and after this nothing remains but to polish. Should the bite, however, be so close as to render the fitting of a cap a difficult matter, it may be necessary to strike up a special top for that particular crown, in which case, the ring being placed round the tooth, we take a small piece of modelling compound, softened by dry heat, place it on top of the ring, and direct the patient to close the teeth tightly upon it, then syringe with cold water to harden the composition. By this means we get an accurate impression, not only of the portion of the tooth within the ring, but also of the "bite." A model with an over-cast is now made from this, when the difficulties which presented

themselves in the mouth can be easily overcome, and one has the advantage of being able to get the crown completed in the laboratory. Of course there are other ways of constructing a plain gold crown: for instance, sometimes the labial and palatal surfaces are stamped up separately, so as to render them convex, and in other instances the loss of tooth-substance has been so great as to necessitate the insertion of retaining pins in the roots.

I now come to the porcelain-faced crown, and, as before, take it for granted that the tooth has been treated, and the apex filled on some former occasion. This crown is most suitable for the front six teeth, and is used with some slight modifications (such as the addition of the lingual cusp), for the bicuspid. My description will refer to one of the incisor teeth, the *modus operandi* being the same for all. Any portion of the tooth remaining above the gum must be stoned down until the labial surface of the root is level with the gum, and the palatal portion nearly so. The taper of the root must then be reversed under the free edge about one-eighth of an inch or more, and the pulp canal enlarged. A collar of gold, similar to that used for the plain crown, is fitted to the root and tightened in the soldering just as the other was done, joining as a rule on the palatal surface. It is now marked on the inside to show the height of the root, and if on removal it is seen to have been sufficiently far down on the gum for strength it is cut to the mark with great care, the labial portion of the band being very narrow. A small piece of plate is now soldered to the ring next the palatal surface, covering the aperture at the top of the pulp canal half-way across. The surface plate is trimmed off and the cap placed on the root, using the mallet and staff to fix it on, and with a fissure-bur we now remove the gold over-hanging the pulp canal, adjust the platinum pin in the canal, and uniting the two with cement wax, they are removed together and then soldered. Placing the ring again in its position, the labial edge of the gold is now ground slightly below the gum by means of a fine corundum stone. In like manner as in the case of the plain gold crown, there are two ways of completing the porcelain-faced one.

A plaster model may be taken with the ring in position and an impression of the antagonizing teeth, and, a suitable tooth having been selected, the work can be completed in the laboratory. In the other case, a porcelain tooth may be fitted to the ring in the

mouth, then cemented to it, syringed with cold water, and removed from the mouth with great care. This is best done by passing an instrument under the gum and withdrawing the tooth by the upper edge of the ring. It is now imbedded in asbestos and plaster and the back filled up in soldering with gold foil scrap so that when finished it may have the contour of the natural tooth on the palatal surface. In making a porcelain crown, there are many modifications of the process I have described, which must be omitted in a brief *résumé* like this. For instance, in many cases I do not solder the pin to the cap before fitting the tooth, but solder them all together. Of the several gold and porcelain crowns in use, the Butener and the Low crowns are very useful in suitable cases, but to both there is the objection that being circular they offer little resistance to any force which would tend to cause them to rotate. This difficulty is overcome when they are used as part of a bridge. With regard to all porcelain crowns, the Logan, I believe to be one of the best, and when used as advised by Dr. C. S. W. Baldwin (*Cosmos*, January, 1887), it combines the advantages of having a ring round the root with the natural translucency of a porcelain tooth when not backed up with metal.

Let me now take the case of a patient who has lost the right upper canine, second bicuspid, and first and second molar, but who has the right upper lateral, first bicuspid and wisdom standing, but all more or less decayed. Such a case was under treatment by me some three years ago, and the bridge I inserted has given the greatest satisfaction both to the patient and myself, and a description of it will serve to illustrate the process of making a bridge, the teeth being parallel with one another, and the case, therefore, a simple one, with no fear of failure, if the operation be properly performed. Having taken impressions of the teeth to be used as the anchorages of the bridge, rings were turned up and suitable masticating tops struck up for the wisdom tooth and bicuspid. At the next visit of the patient, the all-gold crown for the wisdom tooth was completed, and, being smoothed but not polished, it was lined with gutta percha and fixed temporarily in the mouth to be worn till the other crowns were finished. The reason for fixing the wisdom crown to be worn temporarily, is that when the tooth has been stoned with corundum wheels to such a shape as would permit the adapting of the crown, it is rendered more sensitive to heat and cold, and the gutta percha lining

prevents trouble from this cause. At the same visit the roots of the first bicuspid and lateral were treated and filled at the apex, and when the patient came again the crowns for these teeth were finished. The three crowns being in the mouth, and the gutta percha lining having been removed from the wisdom, a piece of soft modelling wax was placed in the intervening spaces, and the closure of the mouth gave an accurate impression of the antagonizing teeth. Next a plaster impression was taken, which on removal brought the lateral and bicuspid crown with it, but the plaster not having sufficient hold on the wisdom it remained, but was afterwards easily set in its proper place in the impression. This being varnished, a model composed of marble dust and plaster was obtained, and by means of the modelling wax impression of the antagonizing teeth, an overcast was made, and nothing remained but to construct the "dummies" (as the substituted teeth between the crowns are termed). These were made in the following manner:—the lost canine was replaced by a flat porcelain tooth, by bevelling the cutting edge of which the gold plate (forming the backing) was made to slightly overlap, so that it was almost impossible for it to be broken in the act of mastication. A convex canine and two centrals formed the porcelain faces of the remaining teeth. These were fitted to the model and then ground down on the cutting edge to permit of stamping up for their masticating tops, similar to those used for the all gold crowns. It requires patience, experience and skill, to fit these tops together, so as to form a useful masticating surface, and at the same time to keep them in such a plane as will cause the force used in eating rather to press them towards the palate than the cheek, and thus help to keep them firmly in place. The teeth, being ground to the proper length, are backed with soft thin platinum, which is carried over their edge the ends projecting, and the tops are then filled with a hard gold solder and adapted closely to the platinum covered edges. The teeth are now waxed on the model and the tops to them, and, the overcast showing them to be in proper relation to the antagonizing teeth, the whole is invested in marble dust and plaster. The wax now being washed out with boiling water, short lengths of gold wire are cut, and with gold scrap, used to fill up the space between the backing and the tops, touching the molar and bicuspid, and the dummies and crowns are now soldered together after cooling down and being boiled out in dilute sulphuric acid. The overlapping pieces of platinum

and the palatal edges of the masticating tops are now filed to a suitable shape, the latter presenting very round edges to the tongue, otherwise they would cause discomfort. Corundum wheels used with a dental engine are found a great help in smoothing the bridge. The polishing at the lathe should be done with sufficient care to prevent the thin rings being damaged by the wheel.

The bridge being now finished, it only remains to cement it in place, which is done at the ensuing visit. Having been tried in the mouth, and everything found satisfactory, it should be removed and dried; then, the natural teeth being protected from the saliva by Parker's fibre lint or a similar absorbent, they are rendered very dry with hot air, the crowns lined with a soft oxy-phosphate cement and the whole pressed into its place, the ivory staff and mallet being used to assist. Care must be taken that no small particles of cement are left under the cervical edge of the gum, or otherwise an amount of periosteal trouble might ensue, which would be difficult to allay.

Modifications of the foregoing course of procedure may be brought into operation as the case demands, but the knowledge of the why and the wherefore can only be bought by experience. If in the case, to which I have referred, the wisdom tooth had been loose or the bicuspid missing, then it would, in my opinion, have been an unsuitable case for bridge work.

It would be inexpedient to lay down a hard and fast rule by which one could judge as to the state of the tooth being suitable or unsuitable for bridge work, but it may be borne in mind that if the extreme anchorages of the bridge are steady, a better result may be expected than would be looked for if one or other were loose.

I would like here to make a few remarks upon what is known as *bar* work. A bar running through a deep groove in a tooth may sometimes be used as one of the termini of a bridge where it would not be advisable to crown the tooth (either from the fact of its not being sufficiently decayed, or not being placed parallel with the other crowned teeth), and where we have one loose tooth between two firm ones, a bar may often render good service as a temporary support if a groove be cut in the three and the bar cemented in with amalgam.

I once used adhesive foil extensively for building in bars, but found that amalgam was much more satisfactory, forming as it

does an intimate union with a platinum bar coated with fine gold. Cottrell's flint edge gold alloy I have found invaluable. But although in some cases we may be compelled to resort to the use of bar work, there is one great objection to it, which is that food packing underneath may cause destruction of the enamel at the cervical edge; in the latter instance, above cited, the bar can be removed after the loose tooth has become rigid.

I would like the student to bear in mind that the difficulties in the practice of crown and bridge work, like gold filling or any other branch of our art, are never to be overcome by a purely theoretical knowledge of the subject. This, however, is essential to success, and may be acquired by studying from such useful works as "The American System of Dental Surgery," edited by Wilbur F. Litch, M.D., D.D.S., Philadelphia.

I trust that this brief paper, hastily thrown together in the intervals of professional labour, may prove to be of some service to the student in sustaining him under difficulties, by the knowledge that with practice, and practice only, comes perfection in any art.

HOSPITAL REPORTS AND CASES IN PRACTICE.

Hyperæmia;

Or the First Stage of Gangrene of the Pulp.

By JAMES RYMER, M.R.C.S., L.D.S.Eng.

HAVING recently had a rather obscure case of the above, it occurred to me that some members might be interested if I published it. An M.D.Lond. consulted me a few weeks back suffering from an ordinary alveolar abscess, with sinus connected with the apex of the second right upper premolar, which was a carious tooth, this abscess he had some six weeks previous to his visit. I treated this successfully in the usual manner (viz., cleared out the pulp cavity, passed a fine probe through the sinus, and injected by means of the hypodermic syringe an iodine lotion, and treated the cavity with ethereal solution of iodoform. After two dressings I was able to fill up the canal with paraffin, over this oxyphosphate cement). About a week later, he returned complaining of pain (of a dull, tense kind), connected with the first right upper premolar. I examined his mouth carefully, but the first premolar was perfectly healthy, except there had been a very small amalgam

filling inserted two years ago ; this I removed, but it was quite superficial, and could not possibly have had any communication with the pulp ; after removal of the filling there was no diminution of pain, and I could find no cause which might give rise to any reflex pain in this tooth. All wisdoms were erupted. I then, as a last resource, drilled into this healthy first premolar ; directly the drill entered the pulp, two drops of light blood quickly escaped from this artificial cavity. I examined the blood immediately microscopically, and found it made up largely of lymph, with only a few red corpuscles, there were no pus cells. I may here mention that on entering the pulp there was no intense shooting pain as usually met with, although the patient easily knew when the drill had entered the cavity ; this tapping gave temporary relief. I now treated the case with an iodoform and creasote dressing, hoping matters would mend, but was disappointed, as the patient returned in two days, having previously made up his mind to have the tooth removed. This I did, after having injected one grain of cocaine with a good result. I then carefully removed the pulp to a slide, and made a careful microscopic examination, and found there was no actual suppuration. Acute inflammation was evident, for the vessels were considerably dilated, and much lymph with numerous leucocytes could be seen. The question that arose was this : How could inflammation have come about in a perfectly healthy tooth without any apparent external lesion ? The answer my friend and myself gave was this ; that the vessels of the first and second premolars must have been in such close continuity, the vessels of the first bicuspid must have become blocked with inflammatory matter, which led to congestion and so inflammation of the pulp. It is easy to understand that air could reach the vessels, &c., of the first premolar, and so set up suppuration if the tooth had been left to nature. I may add that a fortnight ago I saw the patient who was free from all pain and trouble, and was quite satisfied with the result of the radical treatment.

Royal College of Surgeons of England—Examination.

THE next examination for the Licentiatehip in Dental Surgery, of the Royal College of Surgeons of England, will be held on the 20th inst. and two following days. The practical part of the examination will take place at the National Dental Hospital.

REPORTS OF SOCIETIES AND OTHER MEETINGS.

The Odontological Society of Great Britain.

A MEETING of this Society took place at its rooms, 40, Leicester Square, on Monday, Feb. 6th, Mr. S. J. HUTCHINSON, M.R.C.S., L.D.S., Vice-President, in the chair.

There was a full attendance of members. The CHAIRMAN (Mr. S. J. Hutchinson) read a letter from the President, Mr. Daniel Corbett, which stated that much to his regret Mr. Corbett was prevented by illness and the severity of the weather from attending the meeting. Mr. Hutchinson said they must all regret Mr. Corbett's enforced absence, and trust he would be well enough to take the chair at the ensuing meeting, when the inaugural address would be delivered.

Dr. Mitchell, D.D.S. Michigan, was admitted a member of the Society, and Messrs. James F. Rymer, and Alfred Stevens, elected resident, and Messrs. Jonathan Royston, Albert Helyer, and William Matthews, non-resident members.

The LIBRARIAN (Mr. Felix Weiss) reported the receipt of Mr. Christopher Heath's Lectures upon Certain Diseases of the Jaws and the usual periodicals.

The CURATOR (Mr. Storer Bennett) reported the addition of several specimens evincing pathological lesions in the lower animals, including the jaws of a fish of doubtful species, probably a sparoid-fish (Dexter), presented by Mr. Morton Smale, a fine specimen of a Tetradont; the head of a rabbit with crossed and greatly elongated incisors, presented by Mr. Mummery and others.

Mr. STORER BENNETT communicated a casual, describing a dilaceration of the incisors in a porcupine. An incisor had been injured at an early period of its growth, leading to abnormal development. A sinus led down to a mass of what seemed like callus, but really was soft, and contained in its centre osteodentine, many of the tubules being distorted. The tooth appeared to have been broken and the fragments telescoped one into the other.

Dr. ST. GEORGE ELLIOTT introduced his system of crowning teeth. He said Dr. Rollo Knapp's system of building up crowns in gold, although highly artistic, took too long (five hours) to be practical in most cases. Dr. Elliott's method resembled the Richmond crown system, the material point was to fit a gold cap

or lid upon the stump of a tooth, after cutting the stump away nearly to the level of the gum. This was objectionable in so far that it allowed the gold to be visible. Dr. Elliott's plan was first to preserve as much of the stump as possible, only removing such portions as were in the way. An impression was taken of the stump and of the bite, and then by a process similar to swaging, a cap the exact copy of nature was obtained.

Mr. REDMAN (Brighton) believed Dr. Knapp's process was the best one to obtain perfect occlusion.

Dr. CUNNINGHAM (Cambridge) liked a simple gold band or ferrule encircling the root, either with or without metal posts, and retained by a good edge straight amalgam, and thus cold soldering all the parts of the appliance into a firm and compact structure. Although this method lacked the æsthetic finish of the all gold crown, it yet possessed a great merit in the greater accuracy of the fit of the ferrule. After describing the process of taking a metal impression of the root for adjustment of the crown, he drew attention to the value of a modification of the Herbst matrix for obtaining an accurate model.

Dr. MITCHELL deprecated taking any model other than the stump itself. In forming articulating surfaces he found a series of zinc dies, copies of natural teeth, useful, as by turning these slightly whilst striking up, any combination of surfaces can be obtained.

Dr. FIELD believed it essential to the obtaining a perfectly fitting band or ferrule, that the crown of a tooth should be ground down to the level of the gum or below and the thin edges of the enamel removed, so that the circumference of the root shall be at right angles with its surface.

Mr. J. SMITH TURNER thought that the system as described infringed the law laid down in filling, that no rough irritating surfaces should be left.

Dr. FIELD advanced that the cases were not parallel, in filling they dealt with a fairly healthy tooth, in crowning they were working upon a mere shell.

Dr. MITCHELL and Dr. CUNNINGHAM spoke against Mr. Smith Turner's contention, but that gentleman failed to see that his arguments had been met.

Dr. ST. GEORGE ELLIOTT had never seen a failure or irritation follow crowning. He demonstrated the use of the Nitrous Oxide blowpipe. Although Dr. Rollo Knapp claimed to be its inventor and had even patented it, it was known to the Society that one

of its members, Mr. Hunt, of Yeovil, had, nineteen years ago, described and used the nitrous oxide blowpipe.

Mr. J. BLAND SUTTON, F.R.C.S., then read his paper upon "A Remarkable Case of Odontomes in a Thar (Himalayan Goat)."

A thar died with a large suppurating mass involving each upper jaw. On the right side beneath the eye was a sinus discharging pus. The upper molar teeth were defective, and in the middle of each alveolar border was a large recess leading into the antrum. These contained divided hay and chaff. After longitudinal bisection the cut surface showed two rounded tumours connected with the antra and related to the teeth. Each antrum contained a cyst with thick walls, the outer-shell, bone lined with fibrous tissue. The interior contained denticles, fragments of cementum and bone of varying shapes and sizes. In the centre these were matted together with pus, at the sides they were embedded in fibrous tissue and appeared to sprout from the walls of the cyst. Three hundred were present. In his former paper, Mr. Sutton, in classifying odontomes, introduced a class of anomalous odontomes and certain fibrous odontomes were included. Study of this specimen induced him to believe that odontomes of this nature are due to aberrant follicles.

He would further include dentigerous cysts among odontomes, as the normal tooth enclosed in its follicle will, if retained, become encysted and fluid secrete about it. The encystment wall may become thickened (fibrous odontome) or remain quite thin; if thickened it may become ossified (cementum), or only sporadically so (compound follicular odontome), the scattered pieces of bone being denticles, &c. Again, the specimen lends colour to Mr. Sutton's previously advanced contention that hard odontomes only represent half the case.

The CHAIRMAN said the specimen appeared to him the most remarkable yet published. He asked whether cementum or dentine was present in the denticles.

Mr. C. S. TOMES thought the case resembled in some particulars the dentigerous cysts of ovarian origin.

Mr. STORER BENNETT had met with a case in a pig in which bristles actually existed in the cavity of the cyst.

Mr. BLAND SUTTON replied that the denticles contained cementum, but it was doubtful if dentine was present. He believed that dermoid cysts always contained hair, skin or some dermal growth, his specimens only resembled ovarian's dermoids in the presence of the denticles.

Dr. WILLIAM HARLAN, of Chicago, then read a paper upon the "Management of Pulpless Teeth from the standpoint of Daily Practice." Starting with the statement that the retention of dead teeth is rendered desirable for various reasons, Dr. Harlan indicated that very various methods had been adopted to achieve that end; thus, some advocated the immediate dressing and root filling process; others, mechanical methods; others, the time dressing or therapeutic expectant method. Pulpless teeth are classified, as:—1st, Teeth deprived of their pulps by means of corrosive medicaments or immediate operative procedure—cautery, broaches, wooden points, anæsthesia or accident. 2nd, Death of pulp, due to rapid thermal changes after capping or filling. 3rd, Death from partial luxation, as from a blow or fall, or from torsion in treating an irregularity, or from imperfect or partial extraction and replacement of teeth. 4th, Death from gradual exposure by caries or some form of abrasion or erosion. 5th, Death from exposure of the pulp through salivary deposits, exposing the apices of the roots by displacement of tissues, or from the development of pockets resulting from Riggs' disease, and its extension to or around the apices of the roots. 6th, Death by irritation of pulp nodules or strangulation from unknown causes. The variety of conditions causing the death of the pulp naturally require a diversity in the methods of treatment. Dr. Harlan treats *Class I.* as follows:—(a) Complete disinfection, nothing being allowed to enter the pulp chamber or canal, unless purposely placed there by sterilized instruments. (b) Prior to removal of the pulp, albumen coagulators are introduced. (c) The root filling is always selected from innocuous materials, antiseptics and disinfectants are not incorporated in it. The pulp being destroyed, or in a recently fractured tooth hæmorrhage having ceased, the pulp chamber and canals are syringed out with equals parts of peroxide of hydrogen and bichloride of mercury (solution of 1 in 1,000) until free from blood and serum. The root is then dried by absolute alcohol and heated air and filled at once. When a pulp is killed by arsenic or other escharotic, after an interval of two days, the corrosive is removed under antiseptic precautions, and a dressing of tannin and glycerine applied to the pulp. This dressing is perforated to allow egress of blood, &c., gutta percha also perforated is put over this. After eight days, this dressing is removed, the rubber dam applied and the pulp extirpated by sterilized broaches. The pulp chamber and

canals are then treated as above and filled. The canals are not reamed or drilled, access being obtained by freely opening the pulp chamber.

Class II. is thus treated. If no abscess exists, disinfect and fill roots immediately. If cold or dormant abscess is present, the rubber dam is adjusted, the tooth and drill are bathed in terebene or terpinol and the pulp chamber entered, its contents are bathed with some penetrating disinfectant which is left for a few minutes. The *debris* and exudation are drained off through the canal, the peroxide and mercury mixture pumped into the territory beyond the apex until it returns clean and sweet. The roots are not drilled or reamed unless carious. A slender shred of cotton wool saturated with terpinol or other essential oil and the pulp chamber filled with dry cotton and soft gutta percha packed over it, but perforated, to allow egress of gas. This dressing is removed after ten days, when usually the abscess will have disappeared. If moisture enters the canal, the treatment must be repeated. The essential oils act by depositing camphors when at a temperature of 95° , which camphors stimulate the walls of the abscess to granulate. The treatment of cold abscess by powerful escarotics is deprecated, as such are liable to induce acute abscess. Unless complete disinfection of the pulp chamber and canals is effected before the roots are filled, there is danger of forcing septic matter beyond the roots into the tissues around the apex. It is useless to leave disinfectants and antiseptics within the root canal or pulp chamber with a view of preventing subsequent trouble.

Fistulæ when leading from the apex : The canal must be cleansed of *debris*, the dentine disinfected, and the canal and fistula injected with terebene, eugenol, or five per cent. carbolic acid, when immediate root filling is usually permissible.

Class III.—Same treatment as *Class II.*

Class IV.—Encystment or cold abscess often follows gradual exposure and death of the pulp, such cases are treated as described above. When the pulp dies through erosion or abrasion, the apices of the roots are often encysted ; such teeth after disinfection may have their root filled immediately.

Class V.—Cannot be treated by immediate root filling. Gentle stimulation and the retention of temporary fillings in the canals until the fistulæ are healed answers best. Dr. Harlan uses cotton wool soaked in a mixture of oil of cinnamon, twenty drops, and

oils of gaultherium and terebene, each thirty drops, sealing with gutta percha. This dressing is left for one or six months, when the roots are permanently filled.

Class VI.—Usually a temporary dressing covered in with gutta percha, which should be perforated, answers best. In dealing with complications, Dr. Harlan finds pain will always be relieved by drilling directly into the pulp chambers supporting the tooth with the fingers, or producing torsion with a ligature held by an assistant. If much swelling exists and the abscess is accessible, it should be opened with a bistoury, the pulp chamber entered and the pulp gently removed; relief will follow painting the gum with chloroform, tincture of aconite and of iodine equal parts, while one-tenth of a grain sulphide of calcium in pill may be given every ten minutes for an hour. Tonga is also useful. The drill hole should be stopped loosely with iodoform cotton, or cotton soaked in an essential oil for two days. Subsequently the case may be treated as a cold abscess (see Class II.) Pulpless teeth, which are elongated, give pain when the jaws close. The cusps should in this case be ground. Dr. Harlan believes it to be a mistake to simply seal the apex, but would advocate filling the root canals with oxychloride or oxyphosphate or gutta percha. No amount of care in disinfection will achieve a success, if reliance be placed upon cotton wool or what not soaked in antiseptics or disinfectants, and introduced into root canals; such dressings sooner or later fail to check inflammation, abscess, and the establishment of fistulæ.

The CHAIRMAN said Dr. Harlan had handled his subject in a masterly fashion, he felt there would be much discussion and so would suggest no time were lost in commencing it.

Dr. MITCHELL strongly sympathised with the views advanced by Dr. Harlan. He believed the most extreme cleanliness was needful; filling with cotton soaked in antiseptics was a dangerous practice.

Dr. ST. GEORGE ELLIOTT demonstrated a syringe, by means of which even the root canals could be cleansed of *debris* and disinfected. He believed following Rosenthal's method, it would be possible by means of this syringe to introduce gutta percha into the canals and so fill them.

Mr. C. S. TOMES felt he must sound a note of warning, lest operators should, in their zeal for disinfection, lose sight of the exact conditions with which they were dealing, whilst treating

teeth with dead pulps. He believed it was impossible to obtain any truly antiseptic condition, for any one would see if they attempted to force any chemical disinfectant into the pulp chamber and root canals, that such material would penetrate hardly any way into the dentine and so would leave septic material untouched. The fact that Dr. Harlan told them to perforate the capping of gutta percha stultified his contention that the cavity had been rendered truly aseptic.

Dr. FIELD had followed the practice indicated by Dr. Harlan for some while, but had met with occasional failures due, he believed, to the impossibility of rendering the pulp cavities and root canals aseptic in all cases. He thought delicacy of manipulation and care not to go beyond the apical foramen were factors in success. He had met with some cases treated by the old method, filling the canals with antisepticised cotton wool, which had remained quiescent for years.

Dr. WALKER desired to remind the Society that Mr. Thomas Arnold Rogers had, when President of the Society in 1865, introduced the subject to their notice, and had then indicated the essentials for treating teeth with dead pulps. Dr. Walker agreed with Dr. Harlan that cotton filling was bad, he approved filling the canals to the apices with metal after disinfection. He had experienced much benefit from reading a recent paper by Mr. Hern, and by following out his directions to ream and drill widely the openings into the root canals.

Mr. THOMAS ARNOLD ROGERS had not intended to speak, he had in dealing with the question of filling roots advocated that this should be done with gold or some permanent material rather than with asepticised cotton wool.

Mr. HERN thought the discussion should be limited to the treatment of (1) devitalised pulps, and (2) pulps which had died and undergone putrefaction. In the first case, no septic material was present to require removal. He believed that drilling, and reaming were necessary to gain due access to the pulp chamber. By cutting away the tissue, you removed any unhealthy material and left clean walls upon which to work. It seemed to him that Dr. Harlan had returned to the feeble antiseptics when he used the essential oils, he (Mr. Hern) found iodoform most satisfactory, although its odour was against it. Carbolic acid in glycerine was a good lubricant, and absolute alcohol the best drying agent.

Dr. CUNNINGHAM felt the paper needed very extended criti-

cism. Referring to immediate root filling he was prepared to bring statistics upon this point later on. That Dr. Harlan employed sulphide of calcium, and other medical adjuncts showed he sometimes met with inflammatory symptoms. In some exceptional cases, he thought the use of the wooden point might be defended.

Mr. BETTS pointed out that sterilised drills should be used as the head occasionally came off even in skilled hands.

Mr. HARRISON (Brighton) was sure that enough care was not in all cases taken to remove all *debris* before the introduction of the disinfectant.

Mr. E. LLOYD WILLIAMS said one point was at least assured, that they had to treat a septic condition of dentine and not diseased periosteum. The first was easily conquered, the last with difficulty. It must be asked where do injections into cold abscesses go to? He criticised the use of oils in relation with cavities containing water, and doubted if a five per cent. solution of carbolic acid was strong enough.

Mr. R. H. WOODHOUSE confessed to still using wool soaked in antiseptics for very fine canals; oxychloride and gutta percha chloroform with immediate root filling answered well. He found eucalyptol a good antiseptic.

Dr. HARLAN then replied.

The CHAIRMAN thanked the readers of the papers, and those who had given casual communications, and announced that at the next meeting, March 5th, the president would deliver his inaugural address, and Mr. Eve would communicate a paper upon "Actinomycosis of the Jaw."

The Manchester Odontological Society.

THE above Society held a dinner at the Grand Hotel, Manchester, on the 14th January. Invitations had been issued to the President and Council of the Midland Branch of the British Dental Association. Among those present, in addition to the members of the Society, were Dr. Cullingworth (Professor of Obstetrics at the Owens College), Messrs. W. H. Waite (Liverpool), A. M. Matthews (Bradford), T. E. King (York), S. Wormald (Stockport), W. E. Harding (Shrewsbury), G. Brunton (Leeds), Thomas Murphy (Bolton), E. H. Williams (Manchester), J. C. Storey

(Hull), and H. L. Knoop (Hon. Secretary Victoria Dental Hospital).

The PRESIDENT read a short letter from Dr. Young (Dean of the Medical School, Owens College), who stated that he was prevented by illness from being present at the dinner. After the usual loyal toast had been drunk, with musical honours,

Mr. PARSONS SHAW proposed "The Medical Profession," in which he said great advances had been made during the last fifty years, one result being that a better class of men were now entering it. He considered it a profession for high-minded and finely organized men to go into, for he knew of none in which a man could do more good, and in which he could better display all the higher, nobler, and grander qualities of man. Alluding to the presence of Dr. Cullingworth, Mr. Shaw said they would all be aware of the high compliment which had been paid to that gentleman by the invitation to accept an important appointment at St. Thomas's Hospital, London. They all regretted Dr. Cullingworth's departure from Manchester; at the same time they felt sure his subsequent career would be a distinguished one.

Dr. CULLINGWORTH said he must thank them first of all very cordially indeed for the kind manner in which they had responded to the toast proposed by Mr. Parsons Shaw, with whose remarks he would deal *seriatim*. He would first of all speak of the relation of the medical profession of Manchester with the members of the dental profession, and then he would say a word or two in response to the far too kind and flattering remarks about himself. But he might be allowed, before doing so, to congratulate them, and the members of the Odontological Society generally, on the great success of the gathering of that evening. He understood that was the first dinner of the Odontological Society. He admired the wisdom of those who conceived the idea of dining together, for he believed that some of the very best schemes connected with the learned professions had been originated or had been put in tangible shape by that process of dining together. In the medical profession, it was found that if they wanted to consolidate an institution, if they wanted to exercise wholesome and pleasant influence upon men who had been a little bit angular and had been disposed at times to cross one another's path, they could not do better than assemble together at the same dining table, for after all there was a far greater amount of kindness and good fellowship in the world than many persons in their desponding

moments imagined was the case. When people dined together that was soon found out. They then came in personal contact with men they had only heard of, or perhaps, had quarrelled with, and they discovered that there was a good side to such men after all, and that to know them was to learn to respect them. With regard to the medical profession of Manchester, he might say that he believed the kindly words which had fallen from Mr. Parsons Shaw, with respect to the members of that profession, were really deserved. He himself could speak the more freely about the medical men of Manchester now that he was leaving Lancashire, and he had no hesitation in saying that he knew of no other town of anything like equal magnitude, in fact, he knew of no town of a magnitude which led it to be mentioned in that report of the Registrar General which appeared in the newspapers week by week, where the members of the medical profession were on terms of greater friendship with one another, or on terms of greater amity with members of the dental profession. It was a great thing to have had one's lot cast in a town where that could be said. That condition of affairs was largely due to the fact that they met together very much, and there was no doubt the gentlemen he was then addressing—he was not taking up the position of patron of the dental profession, the members of which he looked up to and admired and honoured—were exceedingly wise in following the example of the medical profession in that respect. He was sure that the combining of themselves together in associations not primarily for social but for scientific objects would in the end have not only scientific but also excellent social results. With regard to the kind words of a personal character which had fallen from Mr. Parsons Shaw, he (Dr. Cullingworth) might be allowed to state that he looked forward to leaving Manchester with feelings of very sincere regret. He had while in Manchester received so much personal kindness, and had made so many warm-hearted friends, that he regarded the prospect of removing to another sphere of labour with very considerable regret. At the same time he quite appreciated the high compliment that had been paid him in offering him his new appointment. His medical brethren were also, he thought, pleased on his behalf, believing, perhaps, that his appointment conferred a little reflected credit on the medical profession of Manchester. Any how he hoped they took it in that sense, for he had been twenty years in Manchester, and every one of those twenty years had been a year

of happiness and of increasing respect for the community in which he lived.

Mr. L. MATHESON, in proposing the toast "The Owens College," said he felt it was no small privilege to be called upon to propose the well-being of an institution, which, like the Owens College, was held in high estimation wherever its name was known, and of which all connected with it had just reason to be proud, whether as teachers or students, or as citizens of Manchester. When they considered what the Owens College had achieved, how in a few decades it had taken a very high position among the educational institutions of the land, how that in a generation it had so come to the front that the quality and the amount of its work had been the principal reason for the creation of a new degree-conferring university; when they remembered these things they could not but feel urged by instinctive feelings of reverence and admiration to show the honour which they felt for men to whose energy and devotion the present position of the college was due—men like Principal Greenwood, Sir Henry Roscoe, Dr. Gamgee, and Balfour Stewart—the recent loss of which last named able physicist they all so much deplored. But they had other reasons for remembering Owens College that night. They were met together as Manchester dentists, as men who had the welfare of their profession at heart, as men who appreciated the fact that the highest educational facilities had been brought, as it were, to their very doors, and that was not the time to forget the ready and effectual help rendered by Owens College in promoting an enterprise which to them was of high moment—he meant the establishment of a dental school in Manchester. Nor could they forget that the origin of the Victoria Dental Hospital—without which no school could have been formed, and which, in fact, was absolutely essential to the formation of a dental school—was largely due in the beginning to the energy and kindness of one whose name no longer remained on the staff of the Owens College, but who had left behind him a record of brilliant and arduous services—he referred, of course, to Dr. Arthur Gamgee.

Dr. CULLINGWORTH (who responded in the unavoidable absence of Dr. Young) said he honestly believed that all which Mr. Matheson had said about the aims of Owens College was true; whether, however, it was accomplishing the objects in view was another matter. He wondered what organisation ever did effect all it aimed at. The authorities of the college were constantly

disappointed at the small results obtained, but he was quite sure that as a consequence of the energy put into the work done there a steady impression was being made upon those forces against which the efforts of Owens College were directed—the forces of ignorance and of disease—and an element of strength was imparted to Owens College when a dental department was added to it. Manchester was previously distinctly behind the times in the matter of dental education, and it was owing to the enthusiasm, as Mr. Matheson had said, of their late dean, Dr. Arthur Gamgee, and of two or three leaders of the dental profession themselves, that the dental department was added to the college. He had before him some statistics with regard to the progress which was being made by that department. In two years the number of students had doubled, which was, he considered, a very promising fact; and he believed that in another two years the present number of students would be doubled. There was great vitality in the dental department of the college, which was bound to succeed. A great loss was sustained by that department when Mr. Matheson was translated to London—a loss which those who were left behind at Owens College felt some difficulty in replacing. But institutions were greater and stronger than individuals, and the dental department of Owens College would, he believed, continue to flourish, although one would always remember with gratitude the services Mr. Matheson rendered to it during the time he was one of its lecturers. Before sitting down he would like to say one word about the establishment of a dental diploma in connection with the Victoria University. He did not think that he was revealing any secret which ought not to be made known when he said publicly that the Victoria University was contemplating the establishment of an examination in dentistry, and it proposed to give to the candidate who successfully passed that examination a diploma in dentistry. The matter had been rather a long time in the process of incubation. As secretary of the medical department of the board of studies, the matter had been to a certain extent in his hands. He himself had no experience of dental education; he knew nothing personally about it. Only one member of the committee appointed to consider that question had any practical experience, and to him he (Dr. Cullingworth) relegated the matter, asking him to draw up a draft scheme for consideration. As some time elapsed without anything being heard from that gentleman, he wrote to him inquiring how

matters were going on, and he received a reply stating that the necessary information had been collected, but the draft scheme had not been completed. The gentleman in question mentioned, in excuse for himself, that he was about to be married the following morning, and that he hoped under those circumstances a little more time would be allowed him. Now that was an appeal which he (Dr. Cullingworth) thought would have succeeded with any man. He did not feel he had a word to say when requested to allow a little further time, more particularly as the gentleman in question promised to show the greatest alacrity in the matter on his return from his honeymoon, in which case the new scheme would shortly be promulgated. Those facts showed that the Victoria University was not forgetful of the claims of the dental profession, that it had taken those claims seriously into consideration, and that it quite recognised the importance of the profession by taking up the question of granting dental diplomas. During those remarks he had incidentally stated how lamentably ignorant he and others were of the scheme of education and examination which it was desirable should be adopted for dentists; he need scarcely say, therefore, that those who had the matter in hand would have to be indebted to practical dentists for advice in the matter. They would have to consult their friends, the dentists, before they could produce a scheme of instruction and of examination which would be satisfactory to the dental profession and to the community at large. When called upon for help and counsel, he felt sure they would be able to mature a scheme which would advance the interests of the dental profession in that part of the United Kingdom.

Mr. PETER HEADRIDGE proposed "The Midland Branch of the British Dental Association." He remarked that all honour was due to those who took the first steps towards the formation of such an association, by means of which a valuable reform had been brought about. The British Dental Association had brought together dentists who were previously separated from one another by a distance almost as far as pole from pole, and it had broken down that jealousy which naturally would exist when men lived only for themselves. The association was doing its utmost to put the public on guard against the charlatan, who was a disgrace to the dental profession, and he wished to convey to its representatives the deep consciousness of the members of the Manchester Odontological Society that the Association was doing a great and valuable work.

Mr. WAITE, who was called upon to respond to the toast, asked to be allowed, in the name of the council of the Midland Branch of the British Dental Association, to thank the Manchester Odontological Society for the handsome manner in which the representatives of the Association had been entertained that evening. They all appreciated very highly the kindness of the society, and valued very much that opportunity of meeting the members of the Manchester Odontological Society. There must, he thought, be some great fascination about Manchester to members of the dental profession, for there had been many gatherings of dentists in that city. From the memorable meeting in August, 1875, down to the present time, there had been some fourteen or fifteen meetings of the dental profession in Manchester, altogether apart from the meetings of the Odontological Society. It was only about eight years ago since a meeting was held at the Queen's Hotel, under the presidency of Mr. James Turner, for the purpose of founding a Midland Branch of the then newly-formed British Dental Association. Since that time they had held twenty-four meetings in ten different centres in the Midlands, in Manchester, Liverpool, Leeds, Shrewsbury, Sheffield, Nottingham, Bradford, Chester, and Lancaster, and that night three weeks, they hoped, if all were well, to hold another important meeting in Leeds. They would perceive, therefore, from what he had just said, that the Midland Branch of the British Dental Association was a disciple of Aristotle. Its philosophy was peripatetic; its individuality was unique. That arose from its environment, and its environment was unique also; for he thought there was no district in the whole of the United Kingdom where such an organisation was more required, because there was no district where the proprieties of professional conduct were so little valued and understood. The ambition of those connected with the Midland Branch had been to engender a true correlation between the dental practitioners in the district, to bring them together as closely as possible, and thus do what they could to break down and for ever destroy that indifference and isolation and jealousy to which Mr. Headridge had referred, and which they all felt to be a great hindrance to professional advancement. They had striven to furnish a platform upon which their professional brethren might meet and discuss every subject pertaining to dentistry, and they had done that because they believed that free unfettered communion between one another was the true path of progress,

whether in a scientific or in a political sense. Collateral advantages had continually cropped up from the establishment of the Dental Association. Only about a week ago a meeting of the board of management of the Chester Infirmary was held, at which the chairman, Colonel Evans Lloyd, proposed a resolution, which was warmly supported by the Duke of Westminster, to the effect that henceforth the honorary dental surgeon to the infirmary should occupy a seat upon the board of management along with the honorary physicians and surgeons. And that result was very largely owing to the warm support given to the proposal by the senior physician to the infirmary. Another instance had occurred within a short period in Liverpool, which it might not be amiss to call attention to. They had been doing something there to re-organise the dental hospital, and a week ago the previous Wednesday the augmented staff, consisting of some fifteen or sixteen of the leading practitioners of the city, dined together. In the course of conversation, the idea was thrown out that it would be well to form a society something like that one in Manchester. When that had been done, a suggestion was made to the effect that it might be desirable to consider whether Liverpool and Manchester could not unite their forces and make a good, strong, and vigorous Odontological Society between the two cities. It was, of course, for the council of the Manchester Odontological Society to consider that suggestion. If it commended itself to their judgment, perhaps they would be kind enough to let their brethren in Liverpool hear further on the subject. With regard to the British Dental Association, he might remark that the best way of assisting that Association was for gentlemen who were connected with the dental profession to become members of it. The objects of [the Association were almost identical with the objects contemplated by the Manchester Odontological Society, the only difference being that the Association covered a larger area and embraced a wider field of subjects. The members of the two bodies were, however, not rivals, but brethren who wished to secure a wider diffusion of professional knowledge and a more extended application of that knowledge to the needs of our common humanity.

Dr. JAMES TAYLOR submitted the toast "The Victoria Dental Hospital." In doing so he said there was no district in which people's teeth sooner required professional attention than they did in Manchester. Unhealthy food and unhealthy employments

had a very bad effect on the teeth of a large number of people in Manchester and the neighbourhood, and he thought much good might be done if children, when they were attending school, were taught to exercise care and cleanliness with regard to their teeth. The Victoria Dental Hospital did not come up to his expectations in one respect, for he thought all kinds of operations on the mouth ought to be performed in such an institution. Every dental student ought to be taught how to perform any surgical operation on the mouth and the contiguous parts. But the time allowed at present in the hospital was too short, even supposing that instruction were given in all the diseases of the mouth. It had been a matter of consideration with him as to whether it would not be well to grant a higher degree, or a degree in addition to that now conferred. He would suggest that those who wished to secure the higher degree should stay at the hospital, say twelve months longer, and that the standard of examination should be fixed so high that no student could pass until he could diagnose the diseases of the mouth, and perform the required surgical operations. Until that was done no dental hospital or dental student would come up to the highest level.

Mr. L. DRESCHFELD, who responded to the toast, said he disagreed with some of the remarks of Dr. Taylor, for he thought they had every reason to be satisfied with what had been done by the Victoria Dental Hospital up to the present time. They had plenty of patients, and an efficient staff to give instruction to the students. He thought he might say, on behalf of the staff, that every member of it had the welfare of the school at heart, and was willing to do his very best to teach the young men receiving instruction there to become first-rate practitioners. He hoped it would not be long before their sons might be able to get a diploma from the Victoria University, for the staff of the dental hospital would, he was sure, do their best to keep their teaching at such a high standard that the university would never be ashamed of giving diplomas to those leaving the school.

The PRESIDENT, in proposing "The Guests," remarked that the dignity and importance of the proceedings had been greatly added to by the presence of the visitors.

Mr. W. E. HARDING (Shrewsbury), on being called upon to respond, said gatherings of that kind and societies like the Manchester Odontological Society, showed that the progressive spirit was fully alive in Manchester, a city which, he might add, had

ever stood in the forefront of advancement. He believed that Manchester—if he might except the northern metropolis—was the first provincial city to form a society in any way analogous to that one, for the advancement of dental science and for the promotion of intercourse among the dental practitioners in the district. Murmurs were occasionally heard from some persons as to the social position of the profession. The social position of a profession depended upon the individual members of that profession. When dentists were all educated gentlemen, then dentistry would occupy the social position to which it was entitled. They looked to the Dentists Act to secure the elevation of the profession in the future; for the present they looked to such bodies as the Manchester Odontological Society and other associations to educate the existing members of the profession.

The health of the president of the Society (proposed by Mr. HOOTON) was afterwards drunk in a very cordial manner.

During the evening a glee party contributed to the entertainment of the company; songs were also given by Mr. J. H. Greenwood, Mr. Turnor Grimshaw, Mr. J. D. Smith, and Mr. Hesketh Meade.

MINOR NOTICES AND CRITICAL ABSTRACTS.

An Interesting Case of Fracture.

By DR. WILLIAMSON.

At the December meeting of the Odonto-Chirurgical Society of Scotland, the President exhibited a unique case of fracture of the right central incisor, which had the following history:—A gentleman, about forty-five years of age, had consulted him in regard to the loss of the right central incisor, which for some time had been loose, and latterly had become so troublesome on that account that he removed it with his fingers, leaving a part of the root still remaining, which, being quite loose, was also removed. The left central was markedly discoloured, of a peculiar yellowish tinge, the pulp having evidently been destroyed by some accident which probably happened quite early in life, as he had no distinct recollection of its occurrence.

On examining the two parts, a most curious appearance is presented, a sort of 'natural mimicry in tooth substance, of a

Richmond crown without the pin, the collar or band being represented by the cementum of the coronal fragment, and which fits on the corresponding portion of the apical fragment. In other words, there seemed to be a fracture of the dentine at one part and a fracture of the cementum at another. The dentine fracture is an irregular oblique one, upwards and backwards, the surfaces being quite sharp and seemingly without secondary deposit from



Mesial aspect. *a*. Cemental collar. *b*. Dentinal surface, on which the collar fits. *c*. Triangular fragment of cementum, the base of which is prolonged to the left, as seen in the figure.

[The cut is defective, in so far as the outline of the dentine fracture is much more irregular and angular, and the ridge of cementum, at the base of the fragment is not brought out.]

the cementum. The depth of the collar is rather irregular, either cementum or pulp. The cemental collar seems to be the ordinary layer, of about the normal thickness. On the outside, opposite the site of dentinal fracture, there is not the slightest vestige of thickening, while on the inside the irregular fractured surface of the dentine retains its sharpness at its junction with averaging fully one-sixteenth of an inch, but it is unfortunately deficient on the labial aspect, that portion having been broken off. The edges also are slightly chipped, but on the mesial aspect the edge is perfect, articulating with the corresponding part of the cementum on the apical fragment.

Looking at the apical fragment, there is presented the appearance of the cementum having been removed from a portion of the circumference in order to accommodate the collar of the crown. This denuded part is bounded on the upper side by a ridge of cementum running nearly transversely round the root, the thickest part being on the mesial aspect, forming the base of an irregular triangular piece, which fits into a corresponding depression in the collar as already mentioned, and which in one sense should have formed part of it, but there being an extra thickness at that part, it had given way in the middle instead of at the edge, as in the rest of the circumference.

In the crown fragment the tooth was ground with a corundum wheel, in order to ascertain the condition of the pulp cavity, and it was found to be completely filled with secondary deposit, which extended to the fracture. In the apical fragment, calcification has taken place only at the plane of fracture, as a bristle can be easily passed from the apex up to that point, but not through, although there is an opening, but an extremely small one.

Whatever be the explanation of the conditions presented, it was evident that reunion had taken place by means of the cementum, where the ridge is formed, and also by the calcified pulp, although the latter organ would not add much to the strength of the union, as its substance does not seem to have spread over the fractured surface, as in a case described by Wedl in his "Pathology of the Teeth." The existence of this, or of any slight cemental deposit, could only be definitely ascertained by microscopical examination, which would necessarily destroy the specimen. The separation of the cemental collar must have happened at the period of the first injury, and the actual union taken place at the edges only. Why it should have done so and the dentinal

fracture exist at another place altogether, was quite a puzzle, and which he could not attempt to explain, especially as the union between dentine and cement is supposed to be so intimate, and which fact serves as the practical reason for the removal of a slight scale of enamel at the cervical border of cavities. Another interesting point was the complete calcification of the pulp beyond the fracture, a condition not noted, as far as he was aware, in the rather scanty literature of the subject, but which could readily be ascertained without materially damaging the specimen. In conclusion, as to the number recorded of reunited fractures in the human subject, Wedl states that Hohl in 1870 gives eight as the number of known cases, seven being in incisors and one in an upper bicuspid.—*Transactions of the Odontological Society of Scotland.*

Paralysis of the Fifth Cranial Nerve,*

Delivered at King's College Hospital, December 5th, 1887.

By DAVID FERRIER, M.D., F.R.S.,

PHYSICIAN TO THE HOSPITAL.

GENTLEMEN,—I desire to call your attention to-day to a case of considerable interest, both from a clinical and physiological point of view. It is an instance of an affection occasionally met with, but still comparatively rare, being an uncomplicated case of paralysis of the fifth nerve, practically equivalent to a precise physiological experiment. And it has this advantage over an experiment on any of the lower animals in that, so far as subjective functions are concerned, we are able to obtain direct testimony as to the existence or absence of states of feeling, whereas in the lower animals we are obliged to infer these from external manifestations more or less intelligible. And it is astonishing to find, in respect to questions of this nature—*e.g.*, the sense of taste,—how, apparently with the same facts before them, different observers have come to diametrically opposite conclusions. Let me first give you briefly the chief facts as to the previous history and present condition of the case which I have chosen as the subject of my remarks.

Abel S—, aged forty-eight, railway guard, was admitted

* From notes [revised and amended] by Sir Hugh Beevor, M.B., Medical Registrar.

into the Craven ward on November 25th, 1887. He stated that three years ago he was thrown out of a truck on which he was standing on to the ground, and rendered unconscious for about a quarter of an hour. By his fall he had received several cuts about the head and body, and was obliged in consequence of his injuries to remain off duty for about three months. He states that ever since the accident he has suffered from severe paroxysms of pain over the right side of the head and face. About nine months ago he began to attend the Middlesex Hospital as an out-patient, when he had some teeth drawn from the right upper jaw. No anæsthetic was administered, and yet he felt no pain during the operation. This was the first knowledge he had that he had loss of sensation of that side of his face. Six months ago he began to suffer from inflammation and impaired vision in the right eye, for which affection he has been undergoing treatment up to the present time. His general health has been otherwise good. He admits occasional intemperance and a slight attack of gonorrhœa when eighteen years old, but denies ever having had syphilis. The patient is a healthy-looking man, of a ruddy complexion. The right temporal region and the right cheek appear somewhat thinner than the left, and there is a slight drooping of the right upper eyelid. The ocular movements are normal, as also are the movements of the muscles of expression. He is unable to open his mouth widely, and when it is open the chin deviates very decidedly to the right side. He cannot move the lower jaw from side to side alternately, nor can he protrude the lower beyond the upper incisors. When he closes the jaws, the right temporal and masseter muscles do not become hard like those on the left, and a similar difference is observed in respect to the depressors of the lower jaw when he opens the mouth to its fullest extent. Faradic stimulation of the left temporal and masseter muscles causes instantaneous closure of the open mouth, whereas no effect is produced by faradisation of the same muscles on the right side with as strong a current as can be conveniently borne by the patient. The tongue is protruded straight, and both sides react equally to the faradic current. On examination of the palate it was found that there is a perforation to the left of the uvula which causes a slight deformity and deflection of the uvula to the left side, but the arches of the palate rise normally and equally during inspiration and phonation. There is complete anæsthesia and analgesia on

the right side of the forehead and temporal region, the right eyelids and eyeball, the right side of the nose and right cheek, and anæsthesia, with perhaps slight sensibility to severe pinching along the course of the lower jaw up to the middle line. There is also complete insensibility of the right nostril and the mucous membrane on the right side of the mouth as far back as the tonsil, and a similar condition over the whole of the right side of the tongue. There is also slight superficial ulceration of the mucous membrane of the inside of the cheek, and he says that he cannot feel his food when he chews it on the right side. Smell is slightly diminished in the right nostril; but he is able to recognise the smell of menthol, though less distinctly than with the left nostril. On examination of the right eye Professor Mac Hardy reported as follows:—The right cornea somewhat hazy: the right tension distinctly, though only slightly, greater than the left. Ophthalmoscopic examination reveals no change in either fundus. There is absolute anæsthesia of the right cornea and conjunctiva. The right pupil is almost universally adherent to a ring of inflammatory effusion, some two millimetres in diameter in front of the lens. The action of atropine has failed to break down any of these adhesions. The patient is subject to severe paroxysms of pain in the right eye of a burning character, referred to the back of the eyeball. After examination of the ears, Professor Pritchard reported:—The hearing distance for a watch on the right is $\frac{2}{3}$ ft., on the left $\frac{3}{8}$ ft. After syringing and inflation with Politzer's bag, the condition as to hearing was: left $\frac{6}{8}$ ft., right $\frac{5}{8}$ ft. Tuning fork, medium C, on right mastoid O, left $1\frac{1}{2}$ +; O equalling normal length of time. The high notes of Galton's whistle not heard; lower ones heard equally by both ears. Conclusion: Nerves of hearing fairly normal for age. Middle ears very slightly affected by old catarrh, and probably partly specific; right meatus partially blocked with wax. On removal, right equals left ear. On examination of the sense of taste on November 29th, it was found that neither sugar, nor salt, nor citric acid, nor quinine was appreciated on the right anterior two-thirds of the tongue; whereas on the posterior third on the right side, as well as over the whole of the left side of the tongue, the taste of these substances was easily perceived. Perhaps the power of taste on the posterior third of the right side of the tongue was not so acute, relatively, as that of the left. On December 1st the sensibility of the lower facial region, both

externally and internally, had undergone some improvement; and the same was true as to the common sensibility and sense of taste on the right side of the tongue. The positive pole of the galvanic current was distinctly felt on the right side of the tongue, especially at the tip; less so further back. Quinine was not tasted on the anterior part of the right side of the tongue at all; other substances, such as citric acid, sugar and salt, were now capable of being perceived on the right side, but less distinctly than on the left. A few days later tactile sensibility had almost completely returned in the lower facial region as well as on the right side of the tongue; and at this time sapid substances seemed to be tasted equally well on both sides. The area of anæsthesia in the other parts of the face was also receding, but still very marked in the region of distribution of the first and second divisions of the fifth, and absolute in the right side of the palate and upper jaw and mucous membrane adjoining. Sensation has continued to improve from day to day on the right side, but the eye still remains absolutely anæsthetic, and continues to be the seat of severe pain. The muscles of mastication remain in the same state of paralysis as at first.

(To be continued.)

Composite Odontome of the Upper Jaw; Removal.

BY JORDAN LLOYD, F.R.C.S.

SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM.

TRUE odontomata, judging from the few cases recorded, are probably not of very frequent occurrence. I have Mr. Heath's authority for saying that up to the present time only nine have been published, and all were in connexion with the lower jaw. My case, therefore, appears to be absolutely unique, and deserves on that account to be fully reported. I am indebted to my friend, Mr. Adams Parker, for the patient.

T.M—, male, aged twenty-one years, agricultural labourer, was admitted into Queen's Hospital on October 4th, 1887. He is a robust healthy countryman, and seems to know very little of the history of the condition for which he is under treatment. He says that a long time ago he had a blow on the right side of the upper jaw, but had forgotten all about it until the direct question was put to him. About six weeks since he had toothache in the right upper molars, and noticed shortly that his face and right

eyelid were swollen. Two or three days afterwards an attempt was made to extract a tooth, with the result, so he says, that it was broken in the endeavour. About this time he first discovered the structure for the removal of which he came under my care.

Occupying the front of the right cheek is a hard, painless swelling, evidently springing from the superior maxilla immediately below the malar bone. The hard palate in the posterior half of its right alveolar border bulges inwards. The floor of the orbit is not raised, nor is the right nasal cavity encroached upon. The right alveolar process is much increased in width in its posterior half, and on its border is to be seen a roundish rough hard structure $\frac{5}{8}$ -in. in diameter, and looking like a piece of necrosed bone. There is a small amount of purulent fetid discharge escaping from around this roughened mass. The teeth in both jaws are well formed, but those in the upper maxilla are irregularly arranged, the two lateral incisors lying within the normal dental arch. All the permanent teeth are present in the lower jaw, except the right wisdom. In the upper the wisdom tooth of the left side cannot be seen, and on the right side the teeth are normal as far as the first molar, immediately behind which is the mass above referred to.

A diagnosis of "necrosis" was made, and the patient put under an anæsthetic for the removal of the supposed sequestrum. The mass was found to be excessively hard, and slightly movable laterally, but attempts to elevate it out of its bed were futile. With a chisel and mallet the encircling alveolus was cut through on its outer side, and the tumour was then lifted with a powerful elevator. The resulting cavity admitted the end of a finger, and was lined throughout with a soft velvety layer. There were no openings out of this space in any other direction. There was an escape of a few minims of putrid pus when the growth was disturbed. On the surface of the tumour were several tufts of adherent tissue resembling the lining of an alveolus. The wound was stuffed with glycerine lint, and a few days later the man was sent to his home in the country.

The tumour is irregular in shape, measuring $1\frac{1}{4}$ -in. longitudinally, $1\frac{3}{8}$ -in. in its greatest width, and $1\frac{1}{8}$ -in. from its exposed surface to its deepest part. It weighs 279 grains. Its colour varies in parts, from the pearly-white tint of tooth enamel to brownish-yellow. Its surface is irregularly knobby, of the pattern of the shell of a walnut, with larger excrescences upon it, like the mul-

berry calculus. Some of these processes are formed of dentine, and others of bone-like material. The part which was exposed through the gum had a crater-like arrangement surrounded by a thickened ridge, slightly resembling the top of a large molar tooth. Looking towards the exposed part—that is, in a direction opposite to that in which a tooth root would look—is a small acuminate process, about $\frac{1}{12}$ in. in length, somewhat resembling a tooth fang. On section, the mass is hard, and cuts through with a floury dust. The divided halves, struck together, sound like pieces of flint. The cut surface presents a radiating arrangement of tissues, with its focus towards the anterior surface of the tumour. The bulk of the mass is made up of irregularly arranged layers of osteo-dentine, with cementum here and there in areas over the external surface. Opaline pearly patches are studded irregularly around the edge of the cut surface. One long broad patch, $1\frac{1}{2}$ in. in thickness, of pearly appearance, occupies the whole posterior part of the section, and is well seen in the illustration.

The subject of odontomes was ably discussed, in an exhaustive paper read last year before the Odontological Society of Great Britain, by Mr. J. Bland Sutton, and published in the November Transactions of the Society. Mr. Sutton, who has kindly furnished me with a reprint of his paper, takes a more inclusive view of the subject of odontomes than has been adopted by other investigators. He classes under this head, not only those hard growths composed of enamel, dentine, or cementum, but also certain cystic and fibrous tumours which are well recognised under other names. As, for example, fibroma of jaw and compound cystic sarcoma. He distinguishes at least eleven varieties of odontomes, and the above specimen appears to conform to what he calls “composite odontomes,” which he considers develop through “aberrations of the whole tooth germ.”

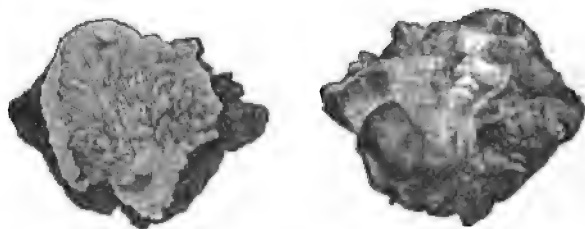
Mr. Heath, in a series of lectures delivered at the Royal College of Surgeons in June last on “Injuries and Diseases of the Jaw,” thus spoke of this particular variety of tumour: “There are, I believe, but nine cases of this form of odontoma recorded, and these all occurred in the lower jaw.” He has met with one case only in his extensive practice, and curiously this was in the person of the daughter of a dental surgeon, and was regarded as one of necrosis until the removal of the tumour by operation cleared up by the diagnosis. A somewhat similar view was originally taken of my patient’s condition. I

had called the attention of my clinical class to the case, and had spoken of it as one of "necrosis," with much that was anomalous about it. I went so far as to tell the students that I believed it to be one of those rare examples of hyperostosis of the upper jaw, the oral surface of which had become necrosed through exposure. Why the exposure had occurred I declined to hazard an opinion. Twice have portions of the jaw been excised (a mutilation altogether unnecessary), and once—Mr. Heath's own case—such a procedure was contemplated. In mine, although I had not suggested such an extreme measure, I had cautioned the patient that my operation might not turn out all that could be desired, and that his tumour might continue to grow, and might subsequently call for further interference.

The view that these growths are due to "certain modifications which the molar teeth undergo during their development" is supported by a careful examination of this specimen. The mass occupied the space of the second, and probably the third, right upper molars; it could be felt to be slightly loose before attempts were made to remove it. After its extraction a deep, round, smooth, velvet-like cavity remained, and the exposed part, with its crater-like hollow and surrounding ridge, bore a certain resemblance to a molar tooth crown.

Suppuration has been present in several of the cases, and this, I think, may be due to an effort of nature to throw off the dental mass, which has become too large to be properly nourished. These inflammatory changes, Mr. Sutton considers, are analogous to the ordinary eruption of normal teeth.

The accompanying illustrations give fairly accurate appearances of the external and sectional surfaces of the tumour, and are



drawn of the natural size. One-half of the specimen is to be deposited in the museum of the College of Surgeons and the other in that of the Odontological Society.

Experience in the Use of Cocaine.

BY WALTER EDMUNDS, M.C., F.R.C.S.

IN applying cocaine subcutaneously for the production of local anæsthesia, it is not advisable to use a stronger solution than five per cent.—at least, such is my experience; for in my earlier cases in which this strength was used constitutional symptoms were never seen; but when, owing to the anæsthesia in one case not being sufficient, a stronger solution was, as a rule, adopted, occasionally there occurred one or more of the following symptoms: pulse becoming very rapid, weak and almost imperceptible; sense of faintness and feeling of distress in the region of the heart; blueness of lips; cold perspirations; restlessness, amounting almost to convulsive movements; and dilated pupils. Happily, these symptoms never lasted very long; but as nothing of the sort was seen with a five per cent. solution, it seems better not to go beyond that strength. Cocaine will entirely prevent the pain of the injection of tincture of iodine into the tunica vaginalis for the cure of hydrocele. In two cases five grains of cocaine dissolved in fifty minims of water was injected through the cannula after the fluid had been drawn off. When after the lapse of five minutes tincture of iodine was injected, there was no pain or feeling of faintness, nor were there any constitutional symptoms from the cocaine. The iodine and the iodide of potassium in the tincture of iodine react with the cocaine chemically, but these changes do not prevent the cure of the hydrocele. It is true that the injection of a saturated solution of carbolic acid in glycerine into a hydrocele sac does not cause pain; but this treatment sometimes fails; indeed it had done so in one of these cases. Cocaine is of special value when the patient is too ill for a general anæsthetic to be administered with safety; it might be thought that constitutional symptoms would be especially apt to occur in these cases, but it is not so. In a child greatly reduced by suppuration about the hip, an abscess was opened under cocaine without pain and without any bad symptoms; and in the case of a man weakened by repeated over-distension of the bladder from enlargement of the prostate, a drain was inserted into the bladder above the pubes under cocaine without pain and without any constitutional symptoms. It is desirable, when cocaine is administered, that some responsible person be told off to converse with the patient, and to attend only to his general condition.—*The Lancet.*

THE JOURNAL OF THE NEW INVENTIONS.

WE have received a new right-angled mallet, manufactured by Hallam and Son, from a design invented by Mr. Beadnell Gill. We have tried it both in and out of the mouth, and find it condenses fairly well any gold of moderate thickness. On comparing the *density* of the plugs with one inserted with the Snow and Lewis mallet, the latter has rather the advantage, but we believe the new right-angled one will, with ordinary care, make a thoroughly serviceable plug. It is neat and small which is a great advantage with a right-angled instrument, where one requires to use a mirror at the same moment. It supplies a want long felt, and is the best of its kind we have seen.

ANNOTATIONS.

THE arrangements for the forthcoming meeting in Dublin seem to be progressing in a very satisfactory manner. The following nominations have been already made for the different committees. For the Demonstration Committee, R. Hazelton, F.R.C.S.I., chairman; Professor R. Stack, F.R.C.S.I., hon. secretary. For the Museum Committee, R. H. Moore, F.R.C.S.I., chairman; A. W. W. Baker, M.D., hon. secretary. For the Reception Committee, D. Corbett, M.R.C.S., L.D.S. (president-elect), chairman; W. Booth Pearsall, F.R.C.S.I., hon. secretary. To those of us who are personally acquainted with our Irish members, these names will in themselves afford a sufficient guarantee of the thoroughness with which the organization of the Annual Meeting will be carried out.

ONE, and that by no means the least, of the advantages which result from our annual gathering, is the opportunity afforded by it for the practical expression of courtesy and goodwill on the part of other literary and scientific societies. The Irish Branch have just received a welcome proof of this in the gracious offer made to them by the authorities of Trinity College, Dublin, to place their rooms at the disposal of the British Dental Association for the Annual Meeting, and to render such other aid as may lie within their power. Welcome as this is from a practical point of view, it is even more so as an expression of kind feeling on the part of Trinity College, and we congratulate our Irish brethren on this invitation so courteously conveyed to them.

THERE will be some special features of interest in the museum exhibits. In addition to the part allotted to the dépôts, for the exhibition of instruments, &c., space will be set apart for the special exhibition of workroom tools, and other instruments made and invented by members of our profession. This will afford an excellent opportunity for the display of the multitude of ingenious contrivances which different dentists have made for use in their own workrooms and surgeries, which they have never dreamt of patenting or making a source of profit through the medium of the manufacturing houses.

THE Telegraph Department of Her Majesty's Post Office recently credited our Irish friends with a greater interest in the atmospheric conditions of the metropolis than they can reasonably be expected to entertain. In replying to a communication from Dr. Stack referring to the offer of Trinity College named above, the following telegram was received :—"MORTON SMALE, HON. SEC. FOGGY LEINSTER SQUARE." The recipient may well have been confused, or perhaps we ought to say—having regard to the well known fertility of the Irish imagination—lost in the mazes of the many possible suggestions which the communication offered. Why 40 should have been rendered "foggy" passes comprehension; the substitution of Leinster for Leicester Square probably arose from the fact that the telegraph clerk, being human, could not entirely free his mind from the associations that were at the moment especially connected with Leinster Hall.

THE LEGAL POSITION OF THE PROFESSION.—The legal position of our profession has been somewhat fully illustrated in our columns during late months; and those of our readers who have perused the leading articles, annotations, law reports and correspondence, bearing on the various aspects of the subject cannot have failed, we trust, to obtain a clear insight into this by no means simple, question. We could wish that every member of the Association who feels that he has not grasped the main facts of this subject—perhaps through not having read the articles and reports to which we refer—would turn from the present number to the Journal as far back as the beginning of the past year, and make himself acquainted with what has there appeared under the headings named. It is impossible for any member to render efficient service in the political work of the

Association, unless he have a clear understanding of the scope and power of the Dentists Act; of the bearing of general medical legislation upon our speciality, and of such other matters, for instance, as registration, and the regulations of the Medical Council. Without such knowledge, it is hardly possible for any one to help in the good work, and indeed, with the best motives, there is always a risk of doing harm, when zeal is not tempered by discretion formed upon adequate knowledge of the circumstances, connections and relations of our entire position. Furthermore, we feel sure that study of these questions will clearly demonstrate that the lines upon which the Representative Board and the business committee are moving, are those in which safety solely lies; for they are lines drawn upon the safe ground of caution and legality along which not only successful action, but the avoidance of disaster are alone possible. Finally, consideration of all points will show, first, that we are making solid progress; and secondly, that the Dentists Act fully promises, if patiently worked, to produce in due course every benefit to the public and profession which the Association could fairly anticipate or its promoters desire.

BIRMINGHAM DENTAL STUDENTS' SOCIETY.—A meeting of the Birmingham Dental Students' Society was held at 71, Newhall Street, on Tuesday, January 24th, 1888. Mr. W. R. Roberts, L.D.S., occupied the chair. There was a good attendance, amongst those present being Messrs. C. Sims, J. Humphreys, W. T. Madin, E. Sims, P. Sims, C. D. Marson, W. J. Royal, G. Foster, W. Whittall, and P. T. Naden. Mr. C. Sims read a paper entitled "Ancient Dentistry" (accompanied with specimens). The paper which was most interesting and instructive dealt with the dentistry of some forty or fifty years ago. Amongst the specimens shown were some plates carved out of bone blocks and having natural teeth fitted on to them in the same way that our tube teeth are fitted on to gold plates. Some of the plates exhibited marked signs of decay, this being attributed to certain causes producing an acid reaction of the secretions of the mouth. At the conclusion of the paper Mr. J. Humphreys exhibited specimens of bone work. Mr. W. Royal also exhibited some old plates, amongst which was an upper bone plate made in Birmingham fifty years ago, for which fifty guineas were paid, this plate being a magnificent piece of workmanship. Several other

specimens were shown. A discussion ensued regarding Mr. C. Sims' paper in which Messrs. J. Humphreys and P. T. Naden took part. Mr. W. J. Whittall was elected a member of the society. Mr. W. Palethorpe was unanimously elected chairman for the next meeting, for which a paper was promised by Mr. E. Sims.

THOSE of our readers who take an interest in the fifth pair of cranial nerves, will do well to study carefully the beautiful account of a case of paralysis by Professor Ferrier, which we print from the *Lancet* at another page. It will be of especial value to students, both as showing them what the physiology of the fifth pair really is, and, what is perhaps more valuable, showing them how to get all that is to be got out of a given case, how to take notes and how to apply them, as constituting fact, an invaluable lesson in pathological investigation. Professor Ferrier's case places many difficulties in the way of the received views with regard to the innervation of the special sense of taste.

THE annual meeting of the Sheffield Association of Licentiates in Dental Surgery was held on Tuesday, January 10th, 1888. An address was delivered by the president, J. Harrison, L.D.S. The following officers were elected for the year:—*President*—Joseph Harrison, L.D.S. *Vice Presidents*—Frank Harrison, M.R.C.S., L.D.S.Ed., and R. C. H. Drabble, L.D.S.I. *Treasurer*—Chas. Stokes, L.D.S.I. *Hon. Secretary*—W. B. Tolputt, L.D.S.Glas. The meetings for the past year have been nine in number and well attended. The following papers have been read: "Dental Hygiene," by F. Harrison, M.R.C.S., L.D.S.Ed.; "On the preparation of the Mouth for the Insertion of Artificial Dentures," by R. C. H. Drabble, L.D.S.I.; "Caries among the Caffres," by J. W. Griffith, L.D.S.I.; "Hæmorrhagic Diathesis," by W. B. Tolputt, L.D.S.Glas.

GLASGOW DENTAL STUDENTS' ASSOCIATION.—At the January meeting of this Association, the secretary having read the minutes of the previous meeting, Dr. J. C. Woodburn, the president, proceeded to deliver a most interesting paper on "The History of Dentistry from the Dark Ages until the Present Time." The paper, which dealt with the subject most fully, was listened to with great interest by the members present. At the conclusion Dr. Woodburn was awarded a hearty vote of thanks for the

trouble he had taken in preparing such an elaborate paper. He was at the same time congratulated on the acquisition of knighthood which had been conferred on him by the government of South Africa. Dr. Woodburn having suitably responded, the date of the next meeting was announced.

At another page, our readers will find a report of the first dinner held by the Odontological Society of Manchester. Odontological societies have so much in common with our Association that we cannot help regarding this meeting as an event in our own history, and claiming some of its success for ourselves. We hope it is the precursor of many more similar gatherings, for as one of the speakers justly remarked, some of the most valuable work in organisation has been inaugurated at these social meetings, and difficulties have often been smoothed over under such auspices that have resisted all attempts at arrangement by correspondence. The speeches are full of interest as testifying to the energy of our Midland representative men, and there is little doubt that the schemes foreshadowed will soon become accomplished facts.

THE resolution passed at the annual meeting of the Chester General Infirmary, in virtue of which the dental surgeon to the institution will henceforth take his proper place among the governing body, is highly gratifying. Scarcely less so is the alteration in the rules whereby the dental officer will be required to be a Dental Licentiate of the Royal College of Surgeons. These changes, which appear to have been made with the practical unanimity of the governors present at the meeting, are proof of that gradual recognition of the dental profession, which has been in progress ever since the commencement of the dental reform movement.

It has been suggested to us that the expression in our January leader of "voluntary and spasmodic efforts" might be thought to imply a desire to underrate the ungrudging services of those who have taken upon themselves the task of assisting the Registrar, in his endeavour to improve the Register. We hasten to disclaim any such foolish ingratitude, and to assure any of our members who may have so read our leader, that we intended to convey no such impression. We intended to express a hope

that in future the regular machinery would be found equal to its work, and in adding that the value of voluntary service depended upon the energy of the volunteers, we had it in our mind that we cannot always count upon the services of such volunteers as Messrs. Waite and Bowman Macleod.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—During the January sittings of the Examiners for the Licence in Dental Surgery, Arthur Turner, Aylesbury, passed the First Professional Examination, and the following gentlemen passed the Final Examination, and were admitted L.D.S.Edin.:—Edward Arthur White, Stoke Holly Cross, Norwich, and John Turner, Edinburgh.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At the January meeting of Examiners, William De Brassey Woodburn, Glasgow, was admitted a Licentiate in Dental Surgery. At the January meeting of the Council it was resolved that applications for admission to the dental examination, *sine curriculo*, would not be entertained after the 31st December of the present year.

VICTORIA DENTAL HOSPITAL, MANCHESTER.—The second meeting of the Students' Society of the Victoria Hospital was held on the 20th of December, 1887. The chairman, W. Smithard, Esq., L.D.S., presented to the society a collection of models, illustrative of cases of syphilis, necrosis, cleft palate, &c. Casual communications were made by Messrs. Birkett, Hootham, and Lathom.

THE next meeting of the Odontolical Society will be held at the Dental Hospital of London, on Monday, the 5th of March, at eight p.m., when the President will deliver his inaugural address, after which Mr. Fredk. Eve, F.R.C.S., will read a paper on "Actinomycosis of the Jaws and Mouth, with Exhibition of Macro and Microscopic Specimens." There will also be a casual communication by Mr. David Hepburn.

CORRESPONDENCE.

We do not hold ourselves responsible for the views expressed by our Correspondents.

Mr. Bullin's Pamphlet.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—Allow me through your columns to thank Mr. Sewill for his answer to Mr. Bullin's pamphlet, in the Journal of the Association, January number. It more clearly defines our position relative to the medical profession, and the steps by which that position was attained, than anything I have yet seen.

Very much of what he says is so applicable on our side of the water, as well as in England, that I hope to call the attention of some of the gentlemen who are disposed to look upon dentistry as an independent profession to his remarks.

Very respectfully yours,

E. A. BOGUE, M.D., D.D.S.

39, Boulevard Haussmann, Paris.

January 19th, 1888.

The Ethics of Journal Correspondence.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—With the exception of the opening sentences of his letter in your January issue, there is nothing expressed by Mr. Charles West from which I can dissent. I admire the feelings which have prompted him to come forward and point out in generous terms the good results which—in spite of some failures—were produced by the late International Medical Congress; to give credit to the managers of the dental section for what of value was brought forward by them, and to explain more fully the beneficial influence of the social intercourse which, he felt, was induced by the Congress. But all that does not affect my main contention—which, I repeat, applies with equal force to the whole Congress, and to every section besides the dental—that it were surely a waste of force to summon the medical profession from the remotest corners of the globe to form a Congress for the discussion of papers which, on the average, would not have, as a rule, found acceptance at a small provincial society. It must also be remembered that demonstrations and clinics are now held daily at most dental hospitals and need no Congress to produce them. I believe it is a fact that not a single original scientific observation of importance was brought forward in any section; and few, if any, of the papers have been since considered worthy of publication in either American or British journals.

My object in writing now, however, is to express my entire dis-

agreement with Mr. West's opinion, if, as it seems, he means to speak generally and not of my letter alone, the opinion "that anonymous communications (in the Journal) should be treated with silent contempt." Communications which merit contempt ought not, and will not I am sure, find admission, under any ordinary circumstances, to your columns ; but, certainly, the mere withholding of a writer's name does not call for such a punishment. Such a restriction would close journals to much (unlike mine) valuable writing, and would be far from desirable in any journal. The only cases in which a writer in a journal seems bound to put his name are those in which personal statements are made, which it would be cowardice to disown ; and it is surely optional in all other cases, even including those in which the addition of his name might give greater weight to a writer's utterances. In the present instance and in my letter which Mr. West criticises, considerations of either kind did not and do not apply, and so, with your permission, I shall continue to sign myself, your obedient servant,

X.

The Lancaster Meeting.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—If Mr. T. E. King will kindly read my letter again, with the report of the Lancaster meeting, as published in the Journal, he must, I think, alter his opinion as to the value of fault finding, as contrasted with the virtue of active co-operation with the Representative Board. Mr. King will also be happy to learn that daily I "gain more experience," and am taking "a fair share of the drudgery of an Association which is essentially provincial." A provincial man myself, I have succeeded in adding twelve new members to the British Dental Association since November, and I even venture to think that "a novice" can hold common-sense views on Association matters. Mr. Renshaw's criticism is more ferocious, but I fail to see how accusations of cowardice, *i.e.* "A man who throws stones from behind a wall" can meet the temperate argument I ventured modestly to advance, when we remember that the publishing committee (to say nothing of our kind and courteous editor) would instantly crush any "attacks" of an ungentlemanly or unworthy kind. "Hard words break no bones," and if it amuses Mr. Renshaw to write them, I am happy to see how well my timid words have "drawn" him, for he nearly altogether agrees with what I wrote. I beg, therefore, Mr. Renshaw will kindly excuse my loss of identity for the present, but I hope some day to make his and Mr. King's acquaintance in a more agreeable way than in a paper "shindy."

I am, Sir, your modest,

"NOVICE."

Professional Charges.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—I shall be glad to have your valuable opinion on the following case :—

A patient (a young gentleman about sixteen years of age) came to me to have his teeth examined, and for the purpose of having them filled. After careful examination I told him he had several which required attention. I then proceeded to prepare them, and after paying six visits, he had four teeth filled with the best gold amalgam and two with best cement ; the latter teeth being in a very bad condition, I did not consider it advisable to use anything very expensive, although the patient wished me to use the best. A few days after I had filled one of the bad teeth it became troublesome, and I wished to remove the filling to give it another trial ; to this the patient objected, and said he would have it out. Nitrous oxide was administered in the presence of a physician and nurse, and the tooth successfully extracted. The account, with details, was sent to the patient's father (the total amount was six guineas, which included fees paid to physician and nurse). To my surprise I have received a letter from the father stating that he "absolutely declines to pay it." He has also stated that he considers it an "imposition," and that he has shown the account to *his* dentist, and *his* dentist said "he would have done the work for half the money." Is this professional etiquette? and do you consider my account *above* the usual charges?

I am,

Yours faithfully,

A DENTIST OF TWENTY YEARS' EXPERIENCE.

Dental Journalism.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—It is a pity a "Committee-man," in his letter in the January number, when intending to enlighten members of the Association, to speak as one having authority, is so careless in his statements.

Twice he mentions the "Journal" Committee, of which Mr. Charles Tomes is chairman, and which, he tells us, controls the subject matter of the Journal. This is quite wrong. The Representative Board has appointed three standing committees, viz., a Business Committee, a Journal and Finance Committee, and a Publishing Committee. It is the last of which Mr. Charles Tomes is chairman, and which supervises the politics and ethics of the matter in the monthly Journal. With these the "Journal and Finance" Committee has nothing to do. The distinction is not an unimportant one, and that a *member* of the Publishing Committee should fall into this error is at least surprising.

A "Committee-man" also tells us that there should be "an editor armed with power enough to maintain consequence, consistency and harmony in editorial utterances." This few will dispute. But when

it is further stated that "the Journal (Publishing?) Committee serves to keep the editor in touch with the members," I join issue with him.

The Business and the Journal and Finance Committee come up for revision at the first Board meeting, after the annual meeting of the Association. But there is this peculiarity about the Publishing Committee, that though appointed in 1879 when the Journal was taken over, this Committee never comes before the Representative Board for re-appointment or revision.

The names of the members of the three committees appointed by the Board have never been published, so far as I have been able to ascertain; and it was only by the efforts of some members of the Board at the December meeting, that it was resolved to print these names in the new list of members of the Association to appear in February.

Perhaps, then, a "Committee-man" will kindly say how a committee, appointed nine years ago, and which never comes up for revision by the Representative Board (a body which from its constitution is essentially in touch with the members of the Association), and of whose composition I venture to say 95 per cent. of the members and three-fourths of the Representative Board are unaware, how the Committee keeps the editor in touch with the members! Is not the reverse the case? The editor receives communications upon all matters, written under varying conditions, and he, as far as the Journal is concerned, is alone in touch with the members.

No one appreciates more than myself the difficulties which the editor and Publishing Committee have had to meet in the conduct of the Journal. Errors have been made and friction engendered which with a more accurate knowledge would, I believe, have been avoided. But in the main the editorial work has been done with singular ability and judgment. No one would wish the editor to assume "a colourless neutral tone." But the Association is a many-sided one, its members range through the three kingdoms, with racial differences and consequent differences of thought and opinion. And in the present condition of our profession, I doubt if too vigorous expression of opinion, even of a majority, is in the best interests of that profession as a whole. We are not united enough and have not yet the position in which we can afford "to take sides."

Finally, I wish to protest against the tone of the letter of "M.R.C.S. and L.D.S., but not J.P.," and of the last paragraph of that of a "Committee-man." Hard-hitting, even anonymously, is vastly amusing to the onlookers (*vide* the Grimthorpe controversy in the *Times*), but the beneficial result is as nothing. It is to be hoped that as these effusions are anonymous, members if they read, will read and forget.

I am,

Your obedient servant,

Glasgow.

REES PRICE.

Pneumatic Mallets.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—Will you allow me the favour of a few words more about pneumatic mallets, in order to point out that the one figured in Messrs. Ash's circular, and last described as Mr. C. Rogers', is entirely different from the first one figured and described with some eulogy in your Journal. I have not seen the American instrument on which it is said to have been founded, and, indeed, was not aware that it was well-known in this country, but I think it is not difficult to prove this priority of my own invention. The minutes of the Odontological Society will show that I exhibited one there many years ago, and before any other was in existence, as far as I am aware. The visitors at the meeting included, I believe, some American gentlemen, and Mr. W. Ash, who asked to be allowed to copy the apparatus, as several members expressed a wish to have one. The instruments were, however, not produced until a considerable time had passed, but eventually a number were made and distributed, and they have since remained upon Messrs. Ash's catalogue.

I am, yours &c.,

AMOS KIRBY.

APPOINTMENTS.

M. H. NISBET, L.D.S.Glas., has been appointed Honorary Dental Surgeon to the Bathurst District Hospital, City of Bathurst, New South Wales.

W. J. FISK, L.D.S.Edin., of Kilburn and Watford, has been appointed Dentist to the London Orphan Asylum, Watford.

M. JOHNSON, L.D.S.I., has been appointed Honorary Dental Surgeon to Chester General Infirmary.

THE following gentlemen have been elected Honorary Assistant Dental Surgeons to the Birmingham Dental Hospital: G. OLIVER RICHARDS, M.R.C.S., L.D.S.Eng., and WILLIAM PALETHORPE, L.D.S.Eng.

NOTE—ANONYMOUS letters directed to the Secretary of the Association cannot receive attention.

P.O. Orders must be accompanied by Letters of Advice.

Communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

Subscriptions to the Treasurer, 40, Leicester Square.

All Contributions intended for publication in the Journal must be written on one side of the paper only. The latest date for receiving contributions for the current number is the 5th of the month.

Members are reminded that their subscriptions are due in JANUARY, and are requested either to remit them direct to the Treasurer, at 40, Leicester Square, or if more convenient, to pay them through their bankers, or through the agency of one of the Dental Depots, and so save unnecessary postage, &c., in applying for the same.

SPECIAL NOTICE.—All communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

THE JOURNAL
OF THE
BRITISH DENTAL ASSOCIATION
A
MONTHLY REVIEW OF DENTAL SURGERY.

No. 3.

MARCH 15, 1888.

VOL. IX.

The British Dental Association *v.* W. F. Bradley.

"If you have a bad case abuse the opposing counsel," is an axiom calculated to provoke a smile, but which, happily, has no practical acceptance with the legal profession. If, however, we may judge from the report we publish of the proceedings which give the title to this article, the defendant's counsel must have had an unusually weak case indeed, considering the line of cross-examination and argument (including imputations upon witnesses) which he felt himself constrained to adopt.

The case is chiefly interesting to us as one which has so far set at rest another of the doubtful points of the Dentists Act, and drawn its meshes still closer, to the confusion of those who wish to appear in other than their true character.

The defendant, although remonstrated with, had deliberately, and as he thought, skilfully, evaded the provisions of the Dentists Act. As set forth clearly by Mr. Melsheimer, he carefully avoided calling himself a dentist, either on his door-plate or in his advertisements. He, however, accepted or "took" the title when it was conferred upon him by a patient, and confirmed his acceptance by acting as a dentist so far as he was able, and by taking payment for the services rendered under the assumed title. Notwithstanding the dust that was so vigorously blown about the question at issue, and the undoubted legal ability of the counsel for the defence, the court had no hesitation in giving judgment for the prosecution, although it inflicted a penalty both in fine and in costs (which the defendant was directed to pay), of comparatively trifling amount.

We may now assume that this decision is considered by the able advisers of the defendant as indisputable, for the threatened appeal has not been resorted to. If however, the Association be compelled to undertake many prosecutions of a like nature, it may become a question with our legal advisers how far it will be necessary to press for more severe penalties and for some different assessment of costs. Since the trial the defendant has announced his intention to appear before the public as a "Dental Mechanician," and in so doing he has made the sharp distinction between the qualified practitioner and the would-be dentist which is so desirable, and which the public will ere long learn to understand and appreciate. That this education of the public is necessarily a long process need not deter us from following it up to the best of our power, and it is one of the primary objects of the British Dental Association to carry on this work, through our annual meetings and through the branch meetings throughout the country. We think that it is much to be regretted that

the power to pursue this useful object should be diminished by the formation of minor independent societies, which in some instances tend to diminish the strength of the Association without conferring any benefit upon their promoters, for there is no advantage connected with them which cannot be had in an enhanced degree in branches and sub-branches of the British Dental Association, the formation of which has been fully provided for in our bye-laws.

The Journal of the Association.

EIGHT years ago this month, the Association published the first number of its Journal; the month of March must therefore be regarded in the light of a birthday by the Journal, and consequently an appropriate moment to wish itself "many happy returns." The traditions of birthdays permit, nay enjoin, that a few pleasant things should be said about the hero of the occasion. On such a day his past triumphs and successes are kindly re-called to remembrance, and pleasant suggestions of a prophetic nature are uttered regarding his future; a little patting on the back occasionally does no one any harm, and we therefore wish success to the Journal, without any fear that we shall be blamed for over-stepping the limits of modesty.

During the eight years of the existence of the Journal, it may be fairly said to have represented the Association with dignity and we trust with literary success. In the year 1886 the circulation increased very rapidly, and it was found necessary to print about one-fifth more copies. In 1887 the increase continued, and we are now printing nearly half as many copies again as were sufficient in 1885. Another sign of the increasing popularity of the Journal among the profession, is the fact that the sale of copies

to those who are not members has been actually doubled since 1885. The increased circulation has re-acted upon the advertisement sheets, which have increased from an average of ten pages in 1885 to an average of eighteen pages. The proof of the pudding is in the eating, and therefore we are justified in concluding that our own intellectual feast suits the palates of our readers—for already, on two occasions, we have been unable to meet the sudden increased demand, and the Journal has gone out of print. So far, then, we have no reason to be ashamed of our brief past, neither have we any grounds for misgiving with regard to our future; but with the object of rendering that future as free from undesirable friction as possible, we shall take the opportunity of pointing out one or two facts with regard to the conduct of the Journal, which are apt to be forgotten and which therefore have to be reiterated from time to time.

Firstly, it is the desire of the Publishing Committee to represent the branches fully and efficiently, and with this object they endeavour to submit all local intelligence to the secretaries of the branches, who, *ex-officio*, are posted in the affairs of their locality, and enjoy the confidence and know the wishes of those whom they represent. Local matter should, therefore, reach us through the local secretaries. Secondly, it must be borne in mind that we cannot engage to insert matter that reaches us later than the 10th of the month, and if the contribution amount to more than a page in length it should reach us by the 8th at latest; moreover, communications wrongly addressed, *i.e.*, either sent to the publishers or to Leicester Square, will necessarily run the risk of being delayed a month thereby. Thirdly, we would inform some of our readers that there is no stigma attaching to anonymous or pseudonymous correspondence; this time-honoured practise is most salutary and

useful in every way, and can in no way be compared to throwing stones from behind a hedge: it is rather analogous to the action of those ancient knights who preferred to enter the lists with a blank shield. The author of the letter takes his hard knocks under his pseudonym, and in every department of journalism this has been a favourite and an honourable practise, neither does the fact of the author's name being attached to a communication in any way vouch for his courage. Fourthly, we would make one more appeal for news: why is it so difficult to get news? We cannot hope that the journal shall interest every one from end to end, but we are quite certain that news and gossip, short scraps of a few lines, interest everybody. The taste for gossip is the most universal taste in existence, probably the most ancient of existing social instincts; the majority of civilised people would rather have their gossip and news absolutely untrue than not have it at all: the greed for news is more than a habit, it is an instinct, and a journal should never omit to cater to this want. We do not propose to adopt the morality of the professed newsmonger and manufacture our news, but we do beg our well-wishers to make us a birthday present of a resolution to send us scraps of news, if possible, through the Branch Secretaries. Finally, we would suggest that, although the journal will endeavour to speak the thoughts of the whole collective Association, it cannot be expected to be the mouthpiece of each individual member, it can only express the views of the majority; we cannot expect to please everybody always, and we do not desire to please those who would always be sowing dissension and disintegration in our ranks. When Sir Peter Teazle said of Joseph Surface that everybody in the world spoke well of him, Sir Oliver replied: "I am sorry to hear it, he has too good a character to be an honest fellow," adding that he must have "bowed as low to knaves and fools as to the

honest dignity of genius and virtue." "What!" retorted Sir Peter, "Do you blame him for not making enemies?" "Yes," rejoined the other, "if he has the merit to deserve them." We have not resembled Joseph in this strange fault, and we do not think those of our readers who admire self-respect would desire to see us do so, still we have endeavoured to do our duty as pleasantly as possible, and we look forward to meeting our readers next year with as satisfactory a retrospect.

Post-graduate Courses at Leicester Square.

THE Medical Committee of the Dental Hospital of London have decided to inaugurate a course of post-graduate demonstrations and lectures, and in so doing they have shown that they have appreciated the growing feeling among all classes of the profession in favour of this method of supplementing the instruction of student life. The desire on the part of qualified men for some means of keeping themselves abreast of the times has of late been making itself widely felt. The happy few who, at the close of their surgical education, find themselves blest with the power and the opportunity of continuing that education in the capacity of teachers, are from the force of circumstances obliged to keep themselves *au courant* with the advances of surgical science and art, but the lot of the majority is to settle down into an inelastic groove of daily routine, and to learn comparatively little of the progress and advances of their calling. The object of post-graduate courses is to afford an opportunity to those who are by force of circumstances withdrawn from the atmosphere of progress and plunged into busy daily work where a certain degree of stagnation is unavoidable, to re-visit the hospitals and schools where new generations are being taught, and to

refresh their memory and rekindle their experimentative ardour by contact with those whom accident and aptitude has placed in the position of teachers. That post-graduate courses have so far proved a success speaks well for the common sense of the average qualified man. No doubt there are among us, as among all collections of men, a few who feel that it is a profession of weakness to confess that they have still anything to learn concerning their profession, and such will necessarily view the desire to teach on the part of the staff of the hospital as an act of presumption. However, the question can hardly be said to concern this contingent ; they are unmolested and need not consider their dignity wounded if some less accomplished or more diffident brethren are willing to try the experiment of watching the operation or listening to the clinical teaching of the present hospital staff. The advisability of the course will be decided entirely by its popularity, and we venture to predict that the verdict will be favourable in London, as it has been elsewhere. If the staff of the Dental Hospital are not specially fitted to teach, we cannot see why they hold their appointments ; at the same time the scheme need not necessarily be confined to the present staff ; we see no reason why the services of able teachers, who have ceased to be upon the active staff, should not be obtained if possible. We are pleased to observe, in the notice we have received of the scheme, that the course is to be pre-eminently practical, the subjects to be discussed and demonstrated are all matters of daily practice, and likely to be of the greatest service to all practitioners. Each teacher has chosen subjects to which he has devoted special attention, and concerning which he may reasonably be supposed to have some useful hints to impart. One word of advice we may perhaps venture to offer, and it is this, that teachers should be specially on their guard against the

insidious temptation to make too liberal a use of the personal pronoun; the opportunity to air one's individual fads, and in fact offer the incense of flattery at one's own altar is difficult to resist; it is easy to do this unconsciously, and it requires some practice to confine oneself to the useful exposition of current and generally accepted views. It is for this reason that the staff of a hospital, who are daily engaged in teaching, are specially fitted for the work, more so than men who, however able, have not made teaching a speciality. We shall watch the result of the experiment with great interest and without much doubt of its usefulness or misgiving as to its ultimate success. We must not, however, forget that it is after all tentative and experimental in its present form, and possibly when translated into fact, some modifications may be found to recommend themselves.

Important Notice.

1. *The attention of every dental practitioner who has obtained a registrable qualification from any medical authority in the United Kingdom is called to the importance of immediately registering his name and qualifications in the Dentists' Register.*

2. *On registration he should be careful to obtain (and thereafter preserve) a certificate of such registration, signed by the Registrar, countersigned by the chief clerk, and stamped with the Council's official stamp.*

3. "By the *Dental Act* (1878), as modified by Section 26 of the *Medical Act* (1886), it is provided.

"(a) From and after the first day of August one thousand eight hundred and seventy-nine, a person shall not be entitled to take or use the name or title of 'Dentist' (either alone or in combination with any other word or words), or of 'Dental Practitioner,' or any name, title, addition, or description implying that he is registered under this act or that he is a person specially qualified to practise Dentistry, unless he is registered under this Act. The words 'Title,

Addition, or Description,' include any title, addition to a name, designation or description, whether expressed in words or by letters, or partly in one way and partly in the other.

"(b) Any person who, after the first day of August one thousand eight hundred and seventy-nine, not being registered under this Act, takes or uses any such name, title, addition, or description as aforesaid, shall be liable, on summary conviction, to a fine not exceeding twenty pounds; provided that nothing in this section shall apply to legally qualified medical practitioners.

"(c) A person registered under this Act shall be entitled to practise dentistry and dental surgery in any part of Her Majesty's dominions, subject to any local law in force in that part, and from and after the first day of August one thousand eight hundred and seventy-nine a person shall not be entitled to recover any fee or charge, in any court, for the performance of any dental operation or for any dental attendance or advice, unless he is registered under this Act or is a legally qualified medical practitioner.

"(d) If a person takes or uses the designation of any qualification or certificate in relation to dentistry or dental surgery which he does not possess, he shall be liable, on summary conviction on such prosecution as hereinafter mentioned, to a fine not exceeding twenty pounds.

"(e) A prosecution for any of the offences above in this Act mentioned may be instituted by the General Council, by a Branch Council, or by a medical authority, if such council or authority think fit, or by a private person."

4. REGISTRAR, AND OFFICE FOR REGISTRATION.

W. J. C. MILLER, B.A., Registrar	} Medical Council Office, 299, Oxford Street, London, W.
of the General Council and of the	
Branch Council for England.	

5. REGISTRATION-FEES.

(a)	For original registration	...	...	...	£5	0	0
(b)	For each additional qualification	...	...	...	0	5	0
(c)	For restoration to the <i>Dentists' Register</i>						
	under Section 12 of the <i>Dentists Act</i>						
	(1878)	...	...	...	...	0	5 0

ASSOCIATION INTELLIGENCE.

Meeting of the Representative Board.

A MEETING of the Representative Board was held on Saturday, March 3rd; Mr. J. Smith Turner (president of the board) was in the chair. The following members were present :—Messrs. Storer Bennett, W. H. Coffin, S. J. Hutchinson, L. Matheson, G. W. Parkinson, C. S. Tomes, C. West, E. L. Williams, A. J. Woodhouse, and the hon. secretary, Mr. Morton Smale (London), Daniel Corbett, W. Booth Pearsall, R. Theodore Stack (Dublin), G. Cunningham, W. A. Rhodes (Cambridge), W. E. Harding (Shrewsbury), W. A. Hunt (Yeovil), R. F. H. King (Newark), T. E. King (York), J. L. Pike (Sheffield), R. Rogers (Cheltenham), and W. H. Waite (Liverpool).

The HON. SECRETARY reported the action taken in regard to the Bradley case, and the Wisbech paper containing Mr. Bradley's advertisement after the trial, was laid before the board. It was pointed out that the public in the neighbourhood of Wisbech had learned much by the case as to the difference between a registered practitioner and one who, not being registered, endeavours to evade the Dentists Act by not calling himself a dentist, although practising in that capacity.

The HON. SECRETARY reported upon the action of the Business Committee in several cases of alleged infringements of the Act, and said that there had been six meetings of the Business Committee since the last Representative Board meeting.

The PRESIDENT said the question of placing the local hon. secretaries on the Business Committee had been discussed in that committee, and, the desirability of the change having been recognised, it was resolved that the hon. secretaries of branches should be ex-officio members of the Business Committee.

Mr. GEORGE CUNNINGHAM reported as follows, the action of the sub-committee appointed at the last board to consider the resolutions passed at the last annual meeting :—

After a long discussion on "The Dental Aspect of Public Health," and the resolutions passed by the Association at the Glasgow meeting, the committee were of opinion that it would be well to gain a knowledge of the working of the present dental appointments in schools such as that at Anerley before bringing the subject before the proper authorities.

It was also determined that the committee should endeavour to ascertain what the probable expense would be of any public dental appointments they were prepared to recommend, and also what amount of operative work might be reasonably expected for such expenditure.

It was also resolved to call the attention of the Lords Commissioners of the Admiralty to the subject by a memorial, requesting the appointment of a dental practitioner, selected by the committee and approved of by the Lords Commissioners, to examine the recruits passing through the London Recruiting Dépôt, to collect statistics of the condition of their teeth and to report thereon, in the hope that it may be of service in extending the field of available recruits for the service, and in other ways promoting the efficiency of the Royal Navy and the Royal Marines.

The PRESIDENT stated that Mr. Fisher (Dundee), had been invited to become a member of the sub-committee.

The HON. SECRETARY of the Irish Branch reported that several cases of transgression of the rules of the Royal College of Surgeons in Ireland by its licentiates had been considered by the council of the college and action taken, and he further stated that the council of the college were in earnest, and intended to act with decision in all cases reported to it of transgression of the rules of that body.

The TREASURER laid the annual audited balance sheet before the board (see page 162).

The HON. SECRETARY reported that the Association had received an invitation from the authorities of Trinity College, Dublin, and the Royal College of Surgeons in Ireland to make use of their building for the annual meeting in August; these invitations were accepted with many thanks. He further reported that Dr. Corleý, President of the Royal College of Surgeons in Ireland had been invited by the Business Committee to read a paper at the annual meeting.

Mr. W. BOOTH PEARSALL gave an interesting detailed account of the arrangements made up to the present for the annual meeting in Dublin, including railway arrangements, &c.

The PRESIDENT congratulated Mr. Pearsall on the admirable arrangements already made, and stated that the Business Committee had at their last meeting passed a vote of thanks to the hon. secretary and Council of the Irish Branch.

The resolution passed at the Leeds meeting, relating to an alleged infringement of the Dentists Act at Halifax, was considered and referred to the Business Committee, with permission to take the legal opinion upon the matter if necessary.

Several other cases of infringement were considered and referred to the Business Committee.

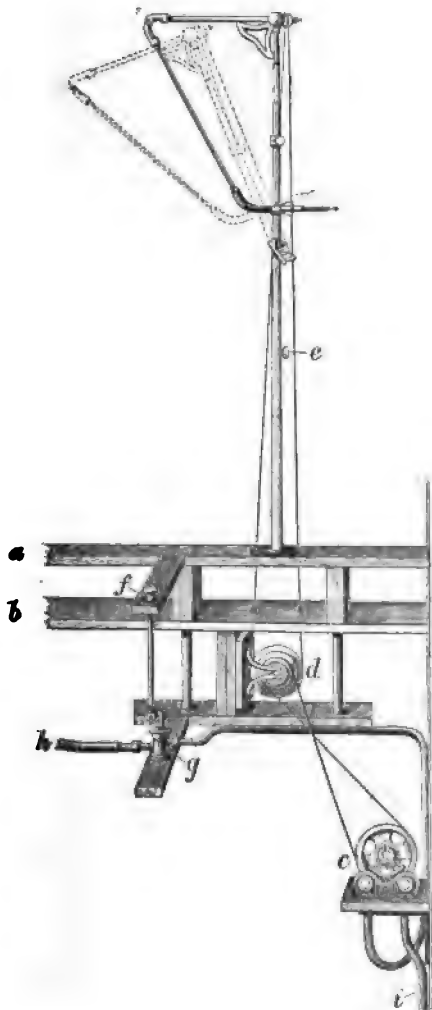
The PRESIDENT read the following extract from the Registrar-General's proposed letter to the registrar of births and deaths :—
"As it is found that in many cases registered dentists are also chemists and druggists, and are, moreover, likely to be described on the registration of their deaths as chemists and druggists only, the Registrar-General further directs that in every instance in which information is given to the registrars of the deaths of chemists or druggists, they will make particular enquiry of the informant, in order to learn whether the deceased had practised as a dentist also, and in case he prove to have done so, that they will insert the additional description on the register, and be careful to despatch the certified copy under the section alone referred to, as well as that under 31 and 32 Vic. c. 121, sec. 12."

West of Scotland Branch.

(Continued from page 73.)

Mr. WALTER CAMPBELL, of Dundee, said: I quite agree with all that Mr. Brownlie has said about the Hastie motor; I have been working with it for fifteen months, without a single hitch. Excepting once or twice when the water supply was shut off in order to repair the pipes in the street, it has never refused to obey the slightest touch of the button. One great advantage this motor has over all others that I have seen or know anything about is, that at its slowest speed (and you can make it go very slow when you wish delicate work), it has the same power as when going rapidly. With the electric motor you cannot have this. I saw all the different varieties of these exhibited at the Congress at Washington. One of them was so arranged that it could be stopped instantly, but you could not diminish the speed without losing power. I regret not being present at the annual meeting of our parent Association, held here in August last, as I should have liked to reply to one or two remarks made after the reading of my brief paper, on the supply and pressure

with reference to the Hastie motor. I quite agree with Mr. Turner, that it may be some time before constant supply and sufficient pressure can be got throughout the whole of London ;



but this is no reason why it may not be made available where constant supply and pressure can be had. According to official information which I then gave, the supply and pressure is suffi-

-cient in several districts in London and more than sufficient in the majority of towns of any size in Great Britain. Of course in towns such as Nottingham for example, where the pressure ranges from 300 to 30 feet, it will depend on the locality, whether high or low, whether one will have enough pressure or not. Mr. Pearsall had said he had a motor which worked very well, but that if anyone drew water from a tap in the house it was apt to stop, and that he gave it up as it was apt to get frozen. A little ingenuity would have prevented this latter, and a tap from the main-pipe would have prevented the other difficulty. The White motor with the vulcanite wheels, which he tried, is as unlike the Hastie, as any two motors can well be. The past year is admitted to have been the driest on record, so that in some towns where a constant supply and high pressure is the normal state of matters (as for instance Exeter, referred to by Mr. Brown-Mason) we need not wonder that the supply had at times to be intermittent. It is certainly desirable to have the supply from the main. A half inch pipe is, in ordinary circumstances, sufficient, and a few feet of this and a little plumber work does not come to much expense. This diagram shows my arrangement for working the motor and dental engine, except that I use the flexible arm with ratchet of the White engine; whereas this shows the head piece of the Parsons-Shaw engine. The upright of engine (e) is made to receive the head-piece of either the White or the Parsons-Shaw engine. I have no hesitation in recommending this arrangement of motor and White's ratchet head piece and flexible arm (I have not used the Parsons-Shaw headpiece in practice and so cannot speak of it). But I can quite understand that this fixed upright will not be found suitable for some practitioners, especially for those who use the Wilkerson chair. I have therefore brought this telescopic wall-bracket to submit to you. It is made like the upright to carry the headpiece and arm of any foot engine now in use.

There is nothing more to do than to lift the head-piece from the pedal engine, and place it front of pulley at extreme end of arm, and make the connection by putting on the elastic cord.

The cord on pulley at wall-plate is in connection with motor, and drives the shaft from that pulley to the one at the end of arm. This arm and shaft is telescopic, and gives an additional length of ten inches. The elastic cord on the pulleys at end of shaft conveys the motion from shaft to hand-piece. With the Parsons-

Shaw head-piece, the motion can be reversed by simply putting a twist on elastic cord, and with the White's flexible arm this can be done by putting a twist on cord below the pulley at wall-plate. To admit of this, about two inches of elastic cord is joined to the cord from motor. A glance at diagram No. 2 will explain the working of this wall-plate bracket with swinging arm. Diagram No. 1 will be enough to enable any intelligent plumber to fit up a motor and make the suitable connections for dental engine.



It is for the dentist to determine the kind of dental engine and the position of the same in his surgery, and also to point out the spot for the button to control the motor.

Mr. OSWALD FERGUS said that through the kindness of Mr. Brownlie he had been allowed to make a few rough trials of the Hastie motor and dental attachments, and had been favourably impressed with the ease with which ordinary manipulations could be accomplished. Being, by habit, a believer in the transmission of power to the handpiece by an endless cord (as in Dr. Bonwill's engine), rather than by a spiral spring, he considered that the Hastie motor might be used in conjunction with the Elliot Suspension engine.

Mr. Fergus mentioned his having seen a suspension engine in a transatlantic dental hospital that commanded a range of three chairs, and after that he thought that wall brackets of the descriptions advocated by Mr. Brownlie or Mr. Campbell, were quite unnecessary, as he could see no special advantage in their more or less limited range, while he was at a loss to conceive of a chair being put into any position that would in the slightest degree interfere with the working of the Elliot suspension engine.

Mr. REES PRICE expressed his approval of the effort of Mr.

Campbell to introduce a horizontal swinging arm to which the cable could be attached. He had all along felt that there were many objections to the fixed upright arm which would seriously prejudice the use of the Hastie water motor. As to the value of the motor as a power for dental use, there could be no doubt the only difficulty was the adaptation of it to the efficient use of the operator. Mr. Brownlie's experience was very valuable, and had cleared up many little difficulties surrounding the use of the motor and a swinging arm. One point had been brought out and Mr. Rees Price thought, should be strongly emphasised, namely, that as the motor would be regulated down to the utmost working capacity required by the operator, it was necessary to take off the water from some point where the pressure would not be liable to disturbance from other causes.

Messrs. BIGGS, W. S. WOODBURN, and CUMMING entered into the discussion, and a vote of thanks to Mr. Brownlie and Mr. Campbell brought the meeting to a close.

At the next meeting Mr. Oswald Fergus and Mr. J. S. Amoores have promised casual communications.

Western Branch.

A MEETING of the council of this branch will be held at the Grand Hotel, Plymouth, on Saturday, April 14th, at three p.m.

HENRY B. MASON, *Hon. Sec.*

Midland Branch.

THE Annual Meeting of the above branch will be held on Friday, May 18th, at the Institute of Science and Art, York.

Members who have communications, or matters of interest to bring forward, are requested to inform the Secretary as early as possible. Subscriptions for the current year are due, and should be forwarded to the Treasurer, Sidney Wormald, Esq., Wellington Road, Stockport.

W. H. WAITE, *Hon. Sec.*

Oxford Street, Liverpool.

The Annual Museum of the Association.

THE Annual Museum of the British Dental Association, will be open on 23rd, 24th, 25th August, 1888, in the Anatomy room of the School of Physic, Trinity College, Dublin.

Floor area 108 by 30 feet : top and side lights.

Section I., Manufactures.—Dental Instruments and Apparatus, exhibited by manufacturing firms or agents. Artificial Teeth. Electrical or Water Motors, and Appliances for Dental Engines. Precious Metals and their Preparations or Alloys. Drugs, Lamps, Chemicals, &c.

Section II., Literature.—Journals. Monographs. Handbooks published during the past five years on Dental Surgery, Physiology, Mechanics, Metallurgy, or Materia Medica.

Section III., Surgical.—Pathological preparations of Diseases of the Teeth and Jaws. Casts of Injuries and Deformities of the Jaws. Regulation cases—Casts showing results of treatment. Appliances used in the treatment of Irregular teeth. Casts of cases of Cleft Palate, with examples of Obturators and Artificial Vela. Specimens of Abnormal Teeth. Interdental Splints, with Casts of cases treated for Fracture of the Jaws. Photographs of cases. Micro-Photographs.

Section IV., Workroom.—Tools. Appliances or Instruments for use in Surgery or Workroom, made and invented by Dentists.

A Catalogue will be issued. The names of the Committee will shortly be published. All applications for space to be addressed to W. BOOTH PEARSALL, F.R.S.C.I., hon. secretary of the Irish Branch of the British Dental Association, 13, Upper Merrion Street, Dublin.

The Benevolent Fund.

THE following Donations to the Benevolent Fund of the British Dental Association have been received by the Treasurer since the Annual Meeting in August :—

Bradford and District Dental Association	£2	2	0
Campion, G. G., 264, Oxford Road, Manchester	1	1	0
Coxon, Stephen A., 4, York Row, Wisbech	1	1	0
Hall, Frank, Fore Street, Hertford	1	1	0
Hope, W. H., Silver Street, Wellingborough	0	10	6
Iliffe, John, 92, Collins Street East, Melbourne, Australia	1	1	0
Mallan, G. Prescott, 30, Monmouth Road, Westbourne Grove, W.	2	2	0
Payling, R., 24, Cowgate, Peterborough	1	1	0
Rhodes, W. A., 53, Trumpington Street, Cambridge ...	1	1	0
Satchell, E. K., 239, Elizabeth Street, Hyde Park, Sydney, N.S.W.	2	0	0

Smith, F., Burlington Street, Chesterfield	£0	10	6
Strachan, J. S., Farmhill Park, Stroud	1	1	0
Tracy, Humphrey W., 6, Hatter Street, Bury St. Edmunds	2	2	0
Woodhouse, A. J., 1, Hanover Square, W....	10	10	0

Annual Subscriptions and Donations are most earnestly requested.

GEORGE W. PARKINSON,

*Hon. Secretary to the Benevolent Fund of the
British Dental Association.*

36, Sackville Street, W.

ORIGINAL COMMUNICATIONS.

The International Medical Congress.*

By W. E. HARDING, L.D.S.Eng.

WE have had several accounts of the Congress at Washington, more or less minute, in the dental journals, which I have no doubt have been read by you all. I shall therefore not weary you with a repetition of its daily proceedings or its social gatherings, but shall endeavour to bring before you a few of the points which struck me most forcibly, and which I think may be of value to us as practical men. There have been various opinions expressed as to whether the Congress as a whole was a success or not, but by a general consensus of opinion the "Dental" was acknowledged to be the most successful section.

The papers read before the Congress were, I think, inferior to those read in London in 1881, but the clinics were both interesting and instructive. This is, I think, what we might expect from a people who are so essentially practical as the Americans. Several of the papers were on the subject of the treatment of pulpless teeth, generally advocating the immediate treatment, in some form. The use of hot air to dry the canal, being much advocated.

An exhaustive paper on "Matrices" was read by Dr. Weeks, of Minneapolis, and one on "A System of Regulating and Retention," by Dr. Angle, which was very interesting, but Dr. Farrar, who opened the discussion, asserted that this system was brought before the profession some years previously by himself, and

* Read before the members of the Midland Branch of the British Dental Association.

indeed, when I called upon him in New York, he showed me drawings of similar apparatus in the MS. of a work he is about to publish. The principle is especially valuable for rotating teeth on their axis. Since my return, I have treated a case in this manner most successfully. It was my intention to have taken a model to show you, but unfortunately the patient is laid up with an attack of scarlet fever; but I have fitted some apparatus on models to show you the principle.

Some remarkably good microphotographs of "dentine of repair," and also of the dental fibres were shown by the aid of the stereopticon in Alburgh's Theatre, and some photographs were shown by Mr. Howard Mummery, of London, but unfortunately the light in the theatre was hardly sufficient to do them justice. To myself, the clinics which were held in the Franklin School, presented the greatest attraction, and though they commenced every morning at 8 a.m., they well repaid one for the trouble of such early rising. Of course Dr. Younger's clinic of implantation, created the greatest sensation; indeed, I found it impossible to get near the chair, but I saw cases after operation.

Gold filling naturally occupied a prominent position. We had examples of all kinds; though most operators used the electric mallet, some used hard pressure and hand mallet, and Dr. Shaway, of Boston, filled with ivory points using them like a burnisher, putting on layer after layer of No. 4 single thickness with the greatest ease and rapidity.

I had the pleasure of a conversation with Dr. Bonwill (whom you know as the inventor of the electric and mechanical mallet) on this subject, and he advocated the use of pluggers with a convex face. Immediately on my return the Dental Manufacturing Company's traveller showed me a set of pluggers on exactly this principle, which have been introduced by Mr. Ladmore and are excellent.

There were several clinics on "immediate root filling." The plan pursued by Dr. Conrad, of St. Louis, is to carefully clear out the canal with broaches and a Gates-Gliddon drill, being most careful not to push any septic matter through the apex, and then to pump up peroxide of hydrogen, and continue this as long as any bubbles are given off. The peroxide being rather an unstable compound readily parts with its oxygen, which oxydises or burns up the micro-organisms and pus cells. When it ceases to give off bubbles he dries the canal, wipes it out with chloroform, and

then pumps up a solution of pink gutta percha in chloroform, and then fills up the canal with one or more gutta percha canal points. His manipulation was beautiful, but time of course alone would test its success.

The unstable character of peroxide of hydrogen renders it necessary to have it tolerably fresh and to keep it in a blue bottle, as light decomposes it.

There is no question that the "immediate treatment" is gaining ground, and it is doubtless the best treatment in cases where the pulp has been destroyed with arsenious acid, but where the soft contents of the canal have undergone decomposition it is open to very grave doubt, unless there is an external sinus.

Several operators gave clinics on the treatment of the so-called Rigg's disease. The thorough scaling of the teeth and removal of necrosed alveolus seemed to be the base of all the modes of treatment. One gentleman, I forget his name, then applied a saturated solution of iodine crystals in creasote, carrying it as deep as possible into the pockets around the necks of the teeth, and then following that up with a saturated solution of tannic acid in glycerine, the patient being directed to return and have the application made daily, and not to brush the teeth while under treatment. The theory being that the tannin combining with the albumen of the bleeding surfaces, sealed in the iodine and creasote.

In continuous gum work, Dr. Haskell, of Chicago, made a very successful full upper suction case for Mr. Campbell, of Dundee, on Dr. Allen's principle, whose pupil, I believe, he had been. It was mounted on a platinum plate and the gum enamel brought all over the lingual surface of the palate. The teeth used were those made purposely for this class of work, having one pin to solder to the plate, and their fangs being seen through the enamel gives the case an exceedingly natural appearance.

Dr. Merriman, of Salem, showed some wheels for dry grinding porcelain teeth, &c. They are made of the enamel which is used for enamelling hollow iron ware, mixed with emery and corundum, and also some with the powders incorporated with celluloid. The former are to be obtained from the Celluloid Emery Wheel Co., Newark, New Jersey, and the latter from the Waltham Emery Wheel Co., Waltham, Mass.

LEGAL INTELLIGENCE.

Dental Association v. W. F. Bradley.

REPORT of proceedings at the Wisbech Police Court, Tuesday, January 10th, 1888.

The magistrates present were the Mayor, J. T. HISCOX, Esq., F. PEATLING, Esq., G. DAWHAM, Esq., and J. LEACH, Esq.

Defendant was charged "for that he not being a legally qualified, medical practitioner, and not being registered under the Dentists Act, 1878, unlawfully did take and use the name and title of dentist, or some other name, title, addition, or description, implying that he is registered under the said Act, or that he is a person specially qualified to practise dentistry." Defendant pleaded not guilty.

Mr. R. E. MELSHEIMER, barrister (instructed by Messrs. BOWMAN and CRAWLEY-BOEVEY, solicitors, 21, Bedford Row), appeared in support of the summons, and Mr. WADDY, Q.C., M.P. (instructed by Messrs. SIDNEY OLLARD and WILSON, solicitors, Wisbech), defended.

Mr. MELSHEIMER, in opening the case, said he appeared for the prosecution, and he had to ask the bench to convict the defendant under the third section of the Dentists Act, 1878, which set forth that certain persons should not be allowed to use the name of dentist or dental practitioner. The charge against the defendant was that he had unlawfully used the name and title of dentist. Now, there probably would be very little dispute about the facts of the case. Since the Act had been in force, the provisions of it had become familiar to unqualified persons, and there was no difficulty now in avoiding the use of the title of dentist on the door-plates, and in advertisements, and he should show them that this was what defendant had avoided doing. He had not used the title in his advertisements, nor on his door-plates. It, therefore, became necessary to invite him to say what he was, and he had used the title "dentist" in conversation. In this conversation he had been asked the question, "Are you a dentist?" and to this question he had replied, "Yes." He would not say that the defendant had used the actual name of dentist, or dental practitioner, but that he had been using the name within the meaning of the Act. It amounted to using the name in his profession, inasmuch as he led persons to suppose he was qualified to act as a dentist. If a stranger were to come into his place and say before he committed himself to him, "I must ask you if you are a person fully qualified," and to this he had answered, "Yes, I am," he thought that that came under the section of the Act upon which they had proceeded. The question for the magistrates to consider was whether defendant had used the title of dentist in the way alleged by complainant. As he first said, the defendant had not used the title in any way in his advertisements. He found a notice of removal in the *Wisbech Ad-*

vertiser for September 21st (a portion of the advertisement was read). He did not mean to use that fact against his friend, Mr. Waddy.

Mr. WADDY: Then don't use it for me. What connection has something that occurred in September with something that happened in August?

Mr. MELSHEIMER said he was obliged to refer to the advertisements to put the case properly before the magistrates.

Mr. WADDY said he must claim to object to the advertisement being read. He could not admit a statement made on August 13th as to the using of a certain name being proved by another circumstance which occurred on September 21st.

Mr. MELSHEIMER said he was going to prove that this title was used on August 13th, in order to show that defendant abstained from using the title publicly. The title of dentist was not mentioned in that advertisement, but he led people to believe that he was qualified. He did not propose to offer the advertisements to support the charge but to explain the reason of bringing the case as it was, and to show that in the defendant's advertisements there was no use of the word "dentist" or dental practitioner. If the bench desired him not to read the advertisements he would not do so. He was not going to press that part of the charge.

The MAYOR: We don't think it necessary for you to read the advertisements.

Mr. MELSHEIMER said then he would lay them on the table. He only meant to show that defendant avoided using the words in his advertisements. With regard to the manner in which the case had been instituted, it would be seen by the Dentists Act, 1878, that a charge could not be commenced without the consent of the General Council. This was now done away with by the Medical Act, 1886.

Mr. WADDY said, he was not aware of the particular provision. It might be so, but he was not aware of it.

Mr. MELSHEIMER said the provision was repealed by the 26th section of the Medical Act, 1886, and it was no longer necessary to get the consent of the General Council to bring a charge of that sort. The case had not been instituted by private persons, but by the British Dental Association, who are qualified dentists associated for the express purpose of preventing persons from doing this kind of work without being duly qualified, and for the protection of the public, so that they should not be operated upon by incompetent persons. The names of all fully qualified dentists were entered upon the Register of the Association, but upon that Register (which he produced) he did not find the name of Mr. Bradley, the defendant, therefore the conclusion was that Mr. Bradley was not a qualified person within the meaning of the Act. Mr. Melsheimer then called the following evidence:—

JOHN HENRY GRIMMETT stated: I am a canvasser to a firm of

surveyors, and live in London. On Saturday, August 13th, I went to the address of defendant, a chemist's shop at 41, Norfolk Street, East. I saw defendant, and said to him, "Are you Mr. Bradley, the dentist?" He said, "Yes." I was shown into a room, a kind of surgery. It was filled with chairs for the use of patients, and there was a sort of mechanical affair which turned round. I saw some instruments in the room.

Mr. WADDY objected to the evidence; if the witness suffered from defendant's malpractices it would be a different thing.

Mr. MELSHEIMER said he was going to show that defendant practised as though he were a qualified man.

WITNESS (continued): I said to defendant, "My friend, Mr. Luce, has a tooth that requires stopping, and he would like you to see it." My friend, who was with me, was asked to sit down, and did so, and was operated upon. I asked defendant if he was a thoroughly practical man, and whether he extracted teeth? I said, "I have a very bad set of teeth, and I thought of having them seen to; if you are a practical dentist, I might let you have the job." He said, "Oh, yes, I am, will you sit in this chair." I sat down, and he examined my teeth. He said, "I can make an excellent job of it. I should require to extract the back teeth, and I should cut off the front." He also said that he would willingly do it for me, and he would not mind doing it for nothing in return for a London testimonial. I asked him how much my friend had to pay, and he said, "Half-a-crown," which I paid him. In the course of conversation, he told me that he had been trained at the London Dental Hospital. I heard a conversation between defendant and my friend, Mr. Luce, who asked him if there were any other dentists in the town. He said, "Yes, there is one man, but I don't think he is up to much," or words to that effect.

Cross-examined by Mr. WADDY: I did not quite gather what your usual occupation was before you embarked upon this last expedition?

WITNESS: I am a surveyor's canvasser.

Mr. WADDY: A surveyor's tout.

WITNESS: The name of my firm is Cooke, Baines and Ball.

Mr. WADDY: I should like to know a respectable firm of surveyors who employ a tout. I suppose they are not only surveyors, but are purveyors of information to dentists?

WITNESS: Mr. Ball asked me to come to Wisbech. He paid my expenses.

Mr. WADDY: Was there any contract existing between you?

WITNESS: No, it was on Saturday when I came to Wisbech.

Proceeding, witness said that Saturday was usually a holiday after half-past one. He left town by the 10.10 a.m. from King's Cross on the Saturday, the same day that they called at Mr. Bradley's place.

Mr. WADDY: Was from ten to two Mr Ball's time?

WITNESS: Yes, I asked him for a holiday.

Mr. WADDY : Mr. Ball asked you to do this for him, you ask him for a holiday and he pays your expenses, and then you say you did not do it for him ?

WITNESS : I said if he would give me the half day off I would do it for him.

Mr. WADDY : Did you make any note of the conversation ?

WITNESS : I made a minute at the time, but I don't know where it is.

Mr. WADDY : When did you see it last ?

WITNESS : I have not seen it since the week following our visit to Wisbech. The week following the visit I gave Mr. Ball an account of the visit.

Mr. WADDY : That would be the 20th of August. Who is this Mr. Luce ?

WITNESS : He is my companion.

Mr. WADDY : What is his occupation ?

WITNESS : He is a clerk in the same place as I am employed.

Mr. WADDY : Then you both had a holiday on this occasion.

WITNESS : Yes.

Mr. WADDY : Is Mr. Luce a surveyor's canvasser too ?

WITNESS : No, he is a clerk in the office.

Mr. WADDY : Had you any idea what interest Mr. Ball had in this case ?

WITNESS : I had not the slightest idea why Mr. Ball instructed me to visit this town.

Mr. WADDY : Then what earthly interest has Mr. Ball, of London, a surveyor, with a dentist down here ?

WITNESS : I don't know.

Mr. WADDY : You told me just now that you made a minute at the time ; I should like to know if you gave a copy of that minute to Mr. Ball ?

WITNESS : No.

Mr. WADDY : And no one besides ?

WITNESS : Mr. Ball requested me to go to the office of a solicitor and prepare an affidavit.

Mr. WADDY : What was his name ?

WITNESS : I think his name was Mr. James, but I am really at a loss on that point.

Mr. WADDY : Can't you give the name of the solicitor in Wisbech ?

WITNESS : I went to a solicitor in Wisbech of the name of James.

Mr. WADDY : On what day ?

WITNESS : On the same day, Saturday.

Mr. WADDY : The thirteenth ?

WITNESS : Yes.

Mr. WADDY : Did anybody instruct you to do this ?

WITNESS : Yes Mr. Ball.

Mr. WADDY : Mr. Ball again ! Did you see Mr. James ?

WITNESS : Yes, I did, I think his name was Mr. James, but I can't say positively.

To Witness : Kindly tell me whether, on this occasion, your services to Mr. Ball have been merely in connection with this business ?

WITNESS : Yes, they have.

Mr. WADDY : You say you sent a copy of this statement of yours to Mr. Ball ?

WITNESS : I just said I did not give him a copy of it.

The CLERK (reading from his notes) : " I gave no copy."

Mr. WADDY : So the note taken of this conversation is not produced, and you say you don't know where it is ?

WITNESS : No.

Mr. WADDY : You say you made a minute of it ; you never kept any record except upon that minute ?

The CLERK : The solicitor wrote it out.

Mr. WADDY : What I ask you is, why did you make the minute ?

WITNESS : I never made a minute of it at all personally.

Mr. WADDY : Where is the minute, it would be interesting ?

WITNESS did not know where it was. The solicitor took it from his mouth. He did not make a personal memorandum of it.

Mr. WADDY : Then I misunderstood you. I should like to see that minute, as it would be interesting, having been made so far back as August last.

WITNESS : I can't explain how it is that the information in this case has not been laid till recently.

Mr. WADDY : Very well ; will you tell me who it was instructed you to in act this manner ?

WITNESS : Mr. Ball.

Mr. WADDY : You came here to try and find out what Mr. Bradley called himself ?

WITNESS : I did.

Mr. WADDY : In conversation ?

WITNESS : I think so.

Mr. WADDY : Why did you not, instead of preparing this trap, Why did you not say, if you had any suspicion of Mr. Bradley, " Have you any objection to tell me what you are ?"

WITNESS : I did not lay a trap, I acted in accordance with my instructions.

Re-examined by Mr. MELSHEIMER : Was there any contract of any sort ?

WITNESS : No.

Mr. MELSHEIMER : Were you to receive any remuneration ?

WITNESS : I was not to receive anything at all from anybody.

Mr. MELSHEIMER : Have you any interest in the result of this prosecution ?

WITNESS : No.

Mr. MELSHEIMER : The solicitor drew up the affidavit.

WITNESS : Yes, I made a statement to him.

Mr. WADDY said he ought to see the affidavit.

Mr. MELSHEIMER : Do you want to see the correspondence which accompanied the document ?

Mr. WADDY said he asked for that which he was entitled to.

The CLERK said he did not see why defendant's counsel should not see the document.

Mr. MELSHEIMER : I object to his seeing it.

The MAYOR : We have the advice of our Clerk that Mr. Waddy may see the affidavit.

Mr. MELSHEIMER : I have done my duty, it is very unusual.

FREDERIC LUCE was then called. He was sworn and stated : I am a clerk in the employ of Messrs. Cooke, Baines and Ball. Mr. Ball asked me to come to Wisbech, and I came with the last witness on the 13th of August. I went with him to the defendant's place in Norfolk Street. We were shown into the consulting room, and I overheard the conversation between the last witness and defendant. Grimmett said, "Are you Mr. Bradley, the dentist?" Defendant said "Yes." Grimmett then said, "I have got a friend who has a tooth that wants stopping." Defendant asked me to take a chair, and I sat down. He stopped the tooth. Grimmett said, "I have a bad set of teeth, will you kindly examine them?" He did so, and said he should have to extract the back teeth, and he thought he should have to cut off the front ones. Defendant said he would not object to do it free of charge to get a London testimonial. We had previously said that we came down from London. I heard the Dental Hospital mentioned; defendant said he had practised there. I said, "I suppose you are the only dentist here?" and he replied, "Well, there's another man, but I don't think that he knows much about dentistry."

Mr. MELSHEIMER : Was the stopping effective ?

WITNESS : No.

Cross-examined by Mr. WADDY : You are in the same office as the last witness ?

WITNESS : Yes, I am now.

Mr. WADDY : Is this the first time you have been on an expedition of this kind ?

WITNESS : Yes.

Mr. WADDY : Have you any idea what interest Mr. Ball has in this matter ?

WITNESS : None at all.

Mr. WADDY : You made a visit with Mr. Grimmett ?

WITNESS : I did so.

Mr. WADDY : I will save the time of the court. You heard Mr. Grimmett talk to a person, and to this person he mentioned the word "dentist" ?

WITNESS: He did.

Mr. WADDY: He used the word "dentist" first?

WITNESS: He did.

Mr. WADDY: Then Mr. Bradley never used the word "dentist" at all?

WITNESS: He did not.

Mr. WADDY: Did you observe outside his door there was a plate with not the word "dentist" but the letters A.P.S. on it?

WITNESS: There was a plate there, but I don't remember what was on it.

Mr. WADDY: Surely you must remember the matter on the plate, when you came down on purpose to find out what he was. Did you not find the words "Mr. Bradley, A.P.S."?

WITNESS: I saw the plate, but I did not notice particularly what was on it.

Mr. WADDY: Then am I right in saying that you did not see a card, an advertisement, or anything in which defendant has ever described himself as a dentist?

WITNESS: No.

Mr. WADDY: Then I won't ask you any more.

THOMAS SMITH stated: I am a clerk to Messrs. Bowman & Crawley-Boevey.

Mr. WADDY: The surveyors?

WITNESS: No, the solicitors, of 21, Bedford Row.

Mr. WADDY (to witness): From whom did you get your instructions?

WITNESS: From Messrs. Bowman and Crawley-Boevey.

Mr. WADDY: Do you know Mr. Ball?

WITNESS: I have seen him.

Mr. WADDY: On this subject?

WITNESS: Only on one occasion.

Mr. WADDY: When was it?

WITNESS: On last Saturday, never before.

Mr. WADDY: Now can you tell me what interest Mr. Ball has in this affair, and what made him act in the matter?

WITNESS: I don't know.

Mr. MELSHEIMER then closed the case for the prosecution.

Mr. WADDY said Mr. Melsheimer had said that the prosecution had been instituted by the British Dental Association. He would say that Messrs. Bowman and Crawley-Boevey were solicitors to some dental association, and he had no doubt were solicitors to a great many people besides. He characterised the action in bringing that case as one of the shabbiest he had ever known brought before in his life. He preferred to say the case was one brought upon the statement of a solicitor's clerk, and entirely apart from the British Dental Association. They had before them a gentleman against whom a

charge had been brought. This gentleman had been resident in the town of Wisbech for some time, how long they knew better than him. This was a penal Act, in which he could not call the gentleman himself. There were two hired witnesses from London to prove an offence against this gentleman.

Mr. MELSHEIMER : I protest against the witnesses being called "hired."

Mr. WADDY said he was right in what he said. The witnesses did it on their own time, and they had that time given to them. They were not children. He was hard upon the two people, coming down from London to carry out their plots. They were mean and contemptible actions, and the arguments in their favour would not hold water for a single moment. The Act was to prevent persons from practising if they were not fully qualified. It was not to stop a man from practising in his trade, just because his name was not on the register of an association formed of members of that profession. There was the Act, which said not only would the man not be allowed to use the words "dentist" or "dental practitioner," but the words "or any such title" were added. He found from another clause that besides this, the man would not be enabled to sue for the recovery of any debt due to him for work done in the following of his profession. They might tell him that the Act was not to stop the man from working, but if a man was told that he might do the work, but must not expect to be paid for it, he thought a circumstance of that kind would pretty nearly stop him. Let them consider if Mr. Bradley had brought himself under the limit of the Act. First let them look at the offence. It was said that he was not fully qualified to practise as a dentist. He had performed one operation for which he had charged two shillings and sixpence, a very low charge, and he himself had on several occasions paid a much larger sum for a similar operation. He was prepared there that day to say that Mr. Bradley was fully qualified to practise, and the grievance was not that he could not practise, but that he could practise a great deal too well for some of them. What could the Act do with him but stop him from placing on his brass-plate, or on his business cards, or in his advertisements his name as a dentist. For this reason in the Act the word "dentist" was put in inverted commas, so that it was presumed that owing to his not being a member of the society of dental surgeons he would not be allowed to stick at the end of his name the words "dentist" or "dental practitioner" or any such words. He did not see why this should be any crime, for the man might if he chose add a long list of his ancestors who were born with a set of teeth in each hand, to the end of his name. This would have no reference whatever to the case, but it would come under this head. What did they show in that case? The man did not use the words at all ; they were taken to him and used for him. Mr. Bradley did not use the words, but a

trap was laid to make him use them. Let them take an instance and say, go to a man of the name of Smith, which was a very common name. There was Mr. Smith the draper, Mr. Smith the grocer, and Mr. Smith the dentist, and if asked whether he was Mr. Smith the dentist, he would say so merely as a matter of identification of his individuality, when spoken to by a person whom he had never seen before. The Act was a penal one, and it ought not to be extended in the manner in which it had been done. Mr. Bradley had not taken the name of dentist, but had been trapped into it. The charge which had been brought against him was simply for an offence committed in conversation. The word had been used in conversation only. He had not told it out publicly, and the information was simply upon that point, and from it he was charged with taking and using the title of "dentist" in his profession. Let them think for a moment and look at the evidence, which was most remarkable. On the 13th of August, the two witnesses came down to Wisbech, but his client knows nothing about it, and hears nothing until the 4th of January.

Mr. MELSHEIMER : I must explain.

Mr. WADDY, continuing, said they knew that in August a communication was sent to London. It was sent to these solicitors. One of them got hold of Mr. Ball the surveyor. He found to his hand a canvasser whom he sent down to Wisbech to interview Mr. Bradley. The canvasser came down, and in order that he might be properly armed, a witness was found to accompany him from the same office. He wished the office luck in possessing two such gentlemen with tastes in that direction. Their case was complete on August 13th, and an affidavit was sworn within two or three days.

Mr. MELSHEIMER : On the same day.

Mr. WADDY said, then it was all completed on that day. Just let them think for a moment what it meant. They have got their case ready, but no move is made in the matter. The man who was carrying on the prosecution, and who had brought the case before them, had not called one single human being in Wisbech to show that he had used the name, and this case had not been heard of for some months. There could not be a single advertisement produced in which the defendant had called himself a dentist. He had a large business, and many persons had availed themselves of his services. They could not produce one single advertisement of that man's in which he had brought himself under the Act. Mr. Bradley had not put upon his cards or brass plates that he was a dentist, he had called himself nothing besides "A.P.S.," which they were well aware meant Associate of the Pharmaceutical Society. If they questioned that, he had his diploma in a nice black frame to prove it, and he was prepared to show them it with far more readiness than his friend allowed him to see the affidavit. If his learned friend desired to prove a quasi-criminal case, his argument had failed just at the important point, he should have followed his case up to the hilt. When they found that

Mr. Bradley would not incriminate himself, they got Mr. Luce and his friend to go down and incriminate him. He was quite surprised when he heard the evidence. He expected the witnesses were going to say that Mr. Bradley had said, "I am a dentist." He still thought there was something to come on the second point, but he was again disappointed. What he could not understand was the long period which elapsed between the completion of the case and the commencement of the action. If his learned friend had not been instructed before, it was because the prosecutors did not move, because they saw they had no case, but if his learned friend had been instructed early, and it was by his advice that the delay had occurred, then he was at fault. The words of the Act must be construed strictly.

The MAGISTRATE'S CLERK said there was no doubt that the wording of the Act must be construed literally.

Mr. WADDY said then that settled his case, and he would not take up the time of the court any longer.

The magistrates retired to consult, and after an absence of twenty minutes, returned into court.

The MAYOR said the magistrates had carefully considered the case, and they were of opinion that defendant had brought himself within the provisions of the Act. They had decided to fine him £5, and costs of court fees, and expenses of witnesses.

Mr. WADDY said he should have to ask for a case to be stated for the High Court of Justice.

Mr. MELSHEIMER said Mr. Waddy could give the usual three days' notice.

Mr. WADDY said he would give verbal notice. He was entitled to do that.

It was understood that a case would be granted, and that the requirements of the Act in that respect would be complied with.

HOSPITAL REPORTS AND CASES IN PRACTICE.

A Case of Salivary Calculus.

By ALFRED SMITH, L.D.S.Eng., and ALEX. T. SCOTT, M.R.C.S.
(Communicated by Mr. SMITH.)

On January 5th of this year, Mr. A. T. Scott, of Holloway, consulted me about a patient then under his care, who had developed symptoms that led him to advise that a special dental opinion should be obtained upon the case. Thinking the notes of the case may be of interest to the readers of our Journal, I subjoin them.

The patient was an unmarried lady of forty years of age, who

had been suffering for some time past from a slowly increasing swelling under the right side of the tongue at the point of opening of the ducts of the sublingual gland. The situation, combined with the hardness of the tumour, and the fact that it moved freely with the movements of the tongue, led us to the conclusion that it was a large salivary calculus, situated in one of Riviniani's ducts.

At the time I saw the patient the swelling was as big as a filbert ; it was causing great pain, and was extremely tender, and had become the seat of great local irritation, which was evidenced by an abundant oozing of foetid pus from the neighbourhood of the gland—in fact, it occasioned so much distress to the patient, that she described her life as rendered miserable in consequence.

We decided to remove it at once, and commenced by injecting a grain of cocaine into the tumour. After a few minutes, greatly to the patient's delight, the tenderness entirely subsided, and I was enabled to grasp the tumour with a pair of root forceps (its extreme mobility made it a very difficult matter to operate upon it, and it eluded any attempt to grasp it with ordinary dressing forceps). Mr. Scott then made a free longitudinal incision, and the calculus at once escaped into the mouth, and, in the act of rinsing out the mouth, fell into the basin.

On account of the very septic condition of the parts, due to the long-continued irritation, we took the precaution of plugging the hole with wool soaked in iodol to promote a healthy process of healing from the bottom. About four weeks after the operation the wound had perfectly healed, the general health vastly improved, and the mouth presented no abnormal appearances. The tumour had been first noticed by the patient about seven years ago, when it was about the size of a small pea. A probe has been passed into Wharton's duct as far as the submaxillary gland and into Bartoline's duct, down to the sub-lingual gland, which latter appeared to be atrophied, in consequence of the pressure of the tumour.

APPOINTMENTS.

THOMAS C. BUTTERFIELD has been appointed to St. Raphael's Blind Asylum and The Little Sisters of the Poor Home of the Aged, Montenotte, Cork.

FRANK LANKESTER, L.R.C.P.Lond., M.R.C.S., L.D.S.Eng., has been appointed house surgeon to the National Dental Hospital, London, W., *vice* Charles A. Pattinson, L.D.S.Eng., resigned.

REPORTS OF SOCIETIES AND OTHER MEETINGS.

Odontological Society of Great Britain.

THE Ordinary Meeting of the above Society was held in its rooms, 40, Leicester Square, March 5th, Mr. DANIEL CORBETT, M.R.C.S., L.D.S.Eng., president, in the chair. There was a full attendance of members and several visitors.

Professor W. D. Miller, of Berlin, was elected a corresponding member, and Mr. Charles Vasey was elected an honorary member by acclamation. Messrs. Hugh Lloyd Williams, M.R.C.S., L.D.S.Eng.; Robert James Lovitt, L.D.S.Eng.; Herbert Apperly, L.D.S.Eng., were elected resident members, and Mr. George W. Watson, L.D.S., Edinburgh, a non-resident member.

Messrs. J. Royston and W. Matthews, having signed the Obligation Book, were formally admitted to membership by the President.

The LIBRARIAN (Mr. Felix Weiss) announced the addition to the library of various periodicals.

The CURATOR (Mr. Storer Bennett) stated that the Society had acquired by purchase two specimens exemplifying dental lesions, viz., a young Bonnet monkey (*Macacus Sinicus*) afflicted with rickets, and an Arctic fox which had exposed pulps in both lower canines, with an alveolar abscess at the root of each; in the latter specimen there was also necrosis of the jaw on the left side.

The PRESIDENT then called upon Mr. David Hepburn for his casual communication.

Mr. DAVID HEPBURN asked the Society's acceptance of a carefully prepared model, showing chronic closure of the jaws in a youth aged twenty-one. There was absolutely no movement between the jaws, and when seen, the only aperture into the mouth was on the left side behind the first bicuspid. The model was executed in wax and colored. In reply to a question from Mr. Smith Turner, Mr. Hepburn stated that the articulation was similar to that which arose when a person spoke through his closed teeth. The cicatrices were extremely dense, and there was probably some loss of bone. The patient habitually wore a black silk protector which hid the deformity.

Mr. FELIX WEISS stated that a similar case had occurred in his practice, which was fully illustrated and described in Mr. Christopher Heath's "Treatise upon Injuries and Diseases of the Jaws." He had in that case inserted a mechanical con-

trivance intended to keep the teeth apart. He hoped if he should be fortunate enough to meet with this patient again to bring him before the society. In answer to a question from the President, Mr. Weiss stated that the closure of the jaws in his case was not due simply to muscular rigidity, but was absolute, and in no sense spasmodic.

The PRESIDENT then called upon Mr. Frederick Eve, F.R.C.S., to read his paper upon "Actino-Mycosis of the Jaws and Mouth."

Mr. EVE said the tendency was to group diseases synthetically, that subsequently they might be analysed. Thus many diseases which formerly were classed together were now divided off, and each one regarded as a pathological entity. So was it with actino-mycosis, a condition which had been first recognised by veterinary surgeons, and by them called the "Worm." This designation was due to the fact that where the diseased tissue was squeezed a worm-like mass appeared. Actino-mycosis with scrofula and tubercle belong to the class of infective granulomata. In the case of actino-mycosis, the disease appeared in the primary site of infection as a ray-shaped fungus surrounded by granulation tissue, but secondary tumours in the viscera were liable to occur. He showed some extremely fine specimens which belonged to the museum of the Royal College of Surgeons, and which exemplified the disease affecting the jaws and mouth.

When the tongue was affected, it became extremely hard and unyielding, and this condition originated the name given to it by veterinary surgeons, viz., wooden tongue. The tongue, besides the hardness, was found studded over with little tumours the size of peas, consisting of colonies of actinomycetes. When occurring in the internal organs, such as the liver, the disease appeared in nodules resembling syphilitic gummata. These nodules are liable to become dislodged in specimens, leaving a honey-combed appearance.

The fungus of actino-mycosis appeared rounded in masses, radiate in arrangement, and varying in size from a grain of sand to that of a millet seed. The section revealed a number of rounded areas with the fungus in the centre, and an accumulation of leucocytes round about. If a transverse section were made of a nodule and magnified, it looked homogeneous and granular, with a radiate arrangement of club-shaped rays like the inner petals of a flower head of one of the Compositæ. The filament of the ray was placed towards the centre, and the clubbed ex-

tremity was peripheral. The masses spoken of above were agglomerations of these radiate colonies, but frequent outgrowths were seen springing from the margin and invading healthy tissue.

Distribution.—The disease seemed either to be more common on the continent, or to have been frequently overlooked in this country, as most of the recorded cases came from abroad. Out of seventy-five recorded cases in the human subject, most instances were affections of the jaws.

Clinical Features.—When involving the jaws, severe pain about a tooth was the first sign, followed by extensive swelling about the jaw in the neighbourhood. Suppuration followed, and the pus in most cases burrowed deeply and widely, riddling the neck with sinuses. Experiments made upon cattle showed that when portions of a tumour of actino-mycosis were inserted under the skin, secondary growths always followed the inoculation, in the same way animals were inoculable from man. The number of animals liable to actino-mycosis was, however, limited; thus rabbits, dogs, and some others were not susceptible. Israël had made some experiments, cultivating the fungus with a view to mitigating its virulence, but his results were not as yet at all definite.

The *botanical position* of the fungus was uncertain.

Access of the poison to the body was probably obtained by abrasions of the mucous membrane or skin. Thus wounds of the tongue due to carious teeth had been found to be the site of inoculation. Inhalation of the fungus also had induced actino-mycosis in the lungs, and swallowing spores had initiated disease in the alimentary tract. Direct inoculation from animals did not appear so common, as out of seventy-five cases recorded, only ten had been those of farmers, farm labourers, or persons connected directly with animals.

The treatment was that followed generally in cases of tumours, viz., free removal by surgical means.

Mr. Eve thought that dentists might often discover the disease in its earlier stages if they would examine the pus of abscesses for the fungus. In conclusion, the speaker desired to make a few remarks upon other micro-organisms found in the mouth. Butlin and others had shown that over fifty micro-organisms existed in the fur of the tongue. He believed it probable that after dentine had become decalcified by acids, or what not, the invasion of bacteria might account for the onset of caries. Undoubtedly, micro-organisms existed in healthy mouths, for after their cul-

tivation, their injection produced septicæmia in rabbits. In spite of this, however, the buccal cavity would seem to have peculiar recuperative powers after injury, possibly due to its vascularity, for although it was impossible to keep wounds in it aseptic, or even secure drainage, yet as a rule they got well without complication. Many affections of the mouth had now been traced to micro-organisms, and although cancer was mainly due to the irritation of jagged teeth, yet he believed a foul state of the teeth also promoted that affection. He would compare the tendency to a deposit of tartar on the teeth to a tendency to phosphatic concretion in the bladder, both being probably due to micro-organisms; many analogous conditions seemed to support such a comparison. In considering these conditions, the speaker contended that they taught the importance of the most scrupulous hygiene being maintained in the mouth.

The PRESIDENT felt they were much indebted for so valuable a communication, and was sure it would provoke much discussion.

Mr. CHARTERS WHITE had been unable to find any satisfactory account of actino-mycosis, although he had carefully searched for one. He hoped the paper would induce fresh investigation.

Mr. WALTER COFFIN had heard of large herds of cattle in Western America being attacked by a jaw disease, called by the cow-boys "big-jaws;" possibly this was really actino-mycosis. He should be happy to attempt to get specimens for investigation.

Mr. SMITH TURNER considered the latter part of the paper trenchanted on debateable ground. He doubted the "jagged tooth" origin of cancer, as many cases of cancer occurred without, as with jagged teeth. He was disinclined to believe tartar was due to micro-organisms, and adduced arguments contesting Mr. Eve's hypothesis.

Mr. STORER BENNETT asked for information as to the best methods for microscopic examination of the fungus. He should like to know whether an inoculated animal was "protected" from further inoculation, as in syphilis. He would ask also if it were known how long elapsed between local infection and constitutional symptoms.

Mr. EVE, in reply, said he agreed with Mr. Smith Turner that cancer often was unconnected with jagged teeth. He prepared his specimens by imbedding in cocoa butter, and stained the fungus with fuchsin, the ground with vesuvin or methyl blue. He was unable to give Mr. Bennett the information he asked, as he believed the matter had not been ascertained.

The PRESIDENT (Mr. Daniel Corbett) then delivered his inaugural address. After thanking the Society for the high honour which had been done him by his election to the presidential chair, he said that he felt regret that, owing to the arduous labours of daily practice, he had been less able than many then present, to undertake scientific research. From the commencement of the movement inaugurated to improve the professional position of dentists, he had given unremitting support to the policy of Sir John Tomes and his co-workers; first, by coming over to London to take the L.D.S. of the Royal College of Surgeons in England, and then by giving his adhesion and support to the Dentists Act. He had also exerted himself in the development of the Irish Dental Hospital. At that institution he had attempted for ten years to further the progress of dentistry by teaching the rising generation of dentists.

He proposed to lay before them some reflections upon diet and its influence on the growth and development of teeth. He believed it to be the function of the dentist to improve the teeth of the human race from one generation to another. Fifty years' experience led him to believe that dentists had done little or nothing in this direction. Dentists, however, are not the only people to blame; ignorance, neglect, carelessness about sanitary and dietetic measures on the part of the patient, conduced to this result. Diet acting on the development, growth and health of the teeth might be considered under three heads: (1) On the foetus *in utero*. (2) On the child and youth until the third molars are fully erupted. (3) On the adult during the rest of life. Also, the question of food resolved itself: first, into that taken by the mother during pregnancy second, the food of the child or youth—and possibly by the adult as a direct nutritive agent to the tooth substance; third, the food of the child, youth, or adult, regarded as a deleterious agent, either by deranging the stomach, or by acting directly on the teeth. Considering the nutrition of the teeth of the foetus *in utero*, a brief account of the development of the teeth was given. Greater delicacy of teeth exists amongst the upper and middle classes, due probably to their luxurious habits. During pregnancy, mothers frequently suffer from capricious appetite, and hence the children's teeth suffer. Every mother should remember, first, that the germ of the tooth should be well formed and capable of assimilating materials for calcification however such may be conveyed to it; second, that such material must be present in the mother's food

during pregnancy and lactation, and in the child's food subsequently; and third, that such material must be presented in an assimilable form. While accepting the view that racial peculiarities may often determine predisposition to dental caries, the speaker believed a close relation to subsist between the food taken and the amount of dental disease produced. Analysis of the food of races and classes, and of the teeth of the people nourished by such food, would bring to light important evidence on this point. Strong teeth are found in the mouths of Hindoos, the Scotch and Irish peasantry, who respectively live upon rice, oatmeal and potatoes. The teeth of the well-to-do of the United Kingdom are very good, while the diet taken by these is mainly an animal one. Caries is most common among this class. Referring to the diet of mothers and growing children, the speaker expressed a high opinion of oatmeal and wholemeal bread as a source of supply of phosphate of lime to the blood. Pregnant women need tissue-forming foods, and it will be best to give them the diet to which they are most used. During early childhood a diet of milk and vegetable food should be advocated.

Dealing with the injurious effects of ingesta upon the teeth Mr. Corbett emphasised the injury which acid drinks, and acids and salts of iron cause the teeth. Similarly, tough fibres from meat and fermentable matters, if allowed to accumulate around the teeth, often initiate dental caries. The use of the toothpick and tooth brush prevents these last causes acting.

The care of the child during its intra-uterine existence and in early childhood usually devolves upon the family medical attendant, and he is often to blame, the speaker believes, for making light of the dental troubles of that period of life, and for omitting to instruct parents in the needful hygienic precautions useful in warding off dental diseases. Medical men are too often ignorant of the physiology and pathology of the teeth, and hence their patients suffer. Mr. Corbett anticipates that when general practitioners are taught to understand the importance of the conservation of the teeth, and encouraged to study dental lesions at dental hospitals, much of this ignorance will disappear, and the dentist and the doctor will work more harmoniously together. Well-directed therapeutic measures, and skilfully adjusted diet would, the speaker believes, do much to check the retrograde process which makes the teeth of each generation worse than that which preceded it. He also thought much good would accrue

from the instruction of girls in physiology, and would advocate that that subject should be included in the curriculum of every girls' school. The knowledge thus gained by the girl would be put into practice by the mother.

At the conclusion of the inaugural address, which was received with much enthusiasm,

Mr. THOMAS ARNOLD ROGERS said that he, as senior member of that Society, rose to propose a cordial vote of thanks to the President for his suggestive and interesting address. Mr. Corbett, they must all feel, was doubly welcome among them, firstly, on account of the zealous way in which he had always sustained the professional status of dentistry, and secondly, because he represented the sister country of Ireland, for which they all felt so much sympathy and affection.

The vote was carried by acclamation, and the President having briefly thanked the Society, announced that at the ensuing meeting to be held on Monday, April 9th, at 8 p.m., Dr. Stretch Dowse would read a paper upon "Some Practical Points in Relation to the Physiology and Pathology of the Fifth Pair of Nerves," and Mr. George Cunningham would read a paper on "A Statistical Enquiry as to the Results of the Immediate Treatment of Painless and Abscessed Teeth."

The meeting then adjourned.

Dental Hospital of London.

A POST graduate course will commence April 24th, and terminate May 7th. Fee for the course, £5 5s. The course will be open (subject to the approval of the committee) to all registered dental and medical practitioners.

PROVISIONAL PROGRAMME.—*Tuesday, April 24th*, 2.30 p.m., Gold and Tin Fillings, Mr. R. H. Woodhouse; 3.0 p.m., The application of the Rubber Dam and other methods of excluding Saliva, Mr. L. Matheson. *Wednesday, April 25th*, 2.30 p.m., Herbst Fillings, Mr. Storer Bennett; 3.0 p.m., Preparation of approximal Cavities and the use of Separators (Cocaine), Mr. W. Hern. *Thursday, April 26th*, 2.30 p.m., Gold Filling with electric Mallet (foot connection), Mr. E. Lloyd Williams; 3.0 p.m. Alveolar Abscess, Mr. Arthur Underwood. *Friday, April 27th*, 2.30 p.m., Gold Filling (hand pressure), Mr. L. Matheson; 3.0 p.m., Treatment of Pulpas, Mr. S. J. Hutchinson. *Saturday, April*

28th, 2.30 p.m., Cohesive Gold Fillings, various Mallets, Mr. W. Hern; 3.0 p.m., Treatment of Pulpless Teeth—(a) Dry Dressings, (b) Immediate Root Fillings, Mr. E. Lloyd Williams. *Monday, April 30th*, 2.30 p.m., Artificial Crowning, Dr. J. Walker; 3.0 p.m., The properties of Metals, Alloys, and Amalgams, Professor Huntington. *Tuesday, May 1st*, 2.30 p.m., Gold Fillings approximal Cavities, Mr. R. H. Woodhouse; 3.0 p.m., Pyorrhoea Alveolaris, Mr. Storer Bennett. *Wednesday, May 2nd*, 2.30 p.m., Non-cohesive Gold Fillings, Mr. D. Hepburn; 3.0 p.m., Palladium and other Plastic Fillings, and the use of Matrices, Mr. L. Matheson. *Thursday, May 3rd*, 2.30 p.m., Contour Gold Fillings, Mr. E. Lloyd Williams; 3.0 p.m., The Treatment of the First Permanent Molar, Mr. S. J. Hutchinson. *Friday, May 4th*, 2.30 p.m., Non-cohesive and Cohesive Gold in combination, Mr. R. H. Woodhouse; 3.0 p.m., Obturators and Impression Taking, Dr. J. Walker. *Saturday, May 5th*, 2.30 p.m., Gold Fillings with the Pneumatic Engine Mallets, Mr. Storer Bennett; 3.0 p.m., Treatment of Fractured Maxillæ, Mr. W. Hern. *Monday, May 7th*, 2.30 p.m., Gold and other Fillings by various Operators.

Early application to attend the above course is to be made to
MORTON SMALE, *Dean*.

London Dental Hospital Students' Society.

A MEETING of the Students' Society of the Dental Hospital of London was held on the 13th of last month, the president, W. Hern, Esq., in the chair.

After the transaction of some formal business and the presentation of casual communications by different members, a paper on "Inflammation" was read by Mr. PRITCHARD.

The PRESIDENT then delivered his inaugural address, in which after thanking the members for his election, he considered the aims and objects of the Society which he regarded as threefold, educational, social and scientific. After some pleasant remarks on the social aspect of the Society, and the suggestion that an occasional conversazione was a desirable thing, provided always that the treasurer approved, Mr. Hern spoke at length on the scientific standard which the Society should aim to reach. Sir James Paget, as renowned for pregnant aphorisms as eminent for brilliant deeds, has pertinently remarked "that the fault of

specialism lies not in its narrowness, but in the shallowness and belief in self-sufficiency, with which it is apt to be associated," and adds, "that if the field of speciality be narrow, it can be dug deeply." He has further remarked that "every fact in science wherever gathered, has not only a present value which we may be able to estimate, but a living and germinal power of which none can guess the issue." In proof of this latter maxim one has merely to refer to the extraordinary value for good, of the discovery of what was at first considered an apparently trivial fact, namely, the anæsthetic effects of the inhalation of nitrous oxide. The carefully collated records of many observers gathered, as they would be, from various sources, and viewing the same condition from different standpoints, may hereafter prove of the greatest value, as means to force open some of the doors, which, even in our speciality, still remain closed to us ; and he could quite conceive that the strongholds which had hitherto proved too stubborn and resistant for individual attack might yield to a combined and determined assault, by that method which is being brought to bear on difficult problems in general medicine and surgery, viz. :—collective investigation.

The speaker next proceeded to point out particular affections, on which light might be thrown by the Society's investigations, instancing in particular, erosion and pyorrhœa alveolaris, in respect of which he said that he entertained a suspicion, which almost amounted to a conviction, that micro-organisms played an important part in the causation of the disease. The influence of heredity on the production of caries and of irregularities, was likewise referred to by the speaker, who closed an interesting address with a number of suggestions of a practical nature in connection with the work of the student.

The Society is to be congratulated on the election of a president who is especially gifted as a teacher, and is in every way in sympathy with the aspirations of the younger generation.

Students' Society of the National Dental Hospital.

THE Annual Meeting was held on Friday, Jan. 13th. Henri Weiss, Esq., president, in the chair.

The following officials were elected for the ensuing year :—
PRESIDENT—Morgan Hughes, M.R.C.S., L.D.S. VICE-PRESIDENTS—Henri Weiss, L.D.S., Willoughby Weiss, L.D.S. HON.

SEC. TO COUNCIL AND TREASURER—Arthur P. Stocken. HO
 SEC. TO SOCIETY—Arthur Logg. COUNCIL: *Past Students*—J.
 Rymer, M.R.C.S., L.D.S., Fred. C. Wright, L.D.S., D.M.D., J.
 Fripp, L.D.S. *Present Students*—F. J. Lankester, M.R.C.
 L.R.C.P., R. S. Faro, J. N. Dunlop.

The PRESIDENT then delivered his valedictory address.

Mr. GADDES proposed, and Mr. KLUGT seconded a vote
 thanks to the retiring President, for the able manner in which
 had filled the office during the past year, which was carried
 unanimously.

Mr. WEISS replied.

Mr. GRUTHAM proposed a vote of thanks to the retiring officer
 seconded by Mr. RUSHTON.

Mr. STOCKEN replied.

The ordinary monthly meeting was held on Friday, Feb. 13,
 Morgan Hughes, Esq., in the chair.

After the usual formal business, the President exhibited a g
 minated temporary lateral and central and well marked supern
 merary cusp and root on wisdom tooth.

Mr. Grutham showed a Coffin expansion plate, having a met
 base; Mr. Field presented the tooth of a ray to the Society; M
 Rushton exhibited a model of mouth in which the canine ha
 erupted well up in the sulcus, and Mr. Fogg showed two cases
 polypus of the pulp. A paper was then read by Dr. MAUGHAN,
 the "Treatment of Pain," which was followed by discussion.

The Dental Hospital of London Annual Meeting

THE annual meeting of governors held at the above institutio
 to-day (March 15th), was attended with special interest on account
 of the extensive alterations and improvements which the hospita
 has recently undergone. Mr. T. A. Rogers, one of the vic
 presidents, having taken the chair, the secretary presented th
 thirtieth annual report of the committee of management, whic
 showed an improvement financially, and in respect of the numb
 of operations, as compared with the previous year. It had be
 found absolutely necessary, in consequence of the continued i
 crease in the number of patients, to further enlarge the hospita
 by the purchase of the adjoining house for £3,500, which nece
 sitated increasing the mortgage debt on the hospital to £5,500.
 A special appeal had been issued for the funds necessary for

fitting up and adapting the new wing, and for redeeming the mortgage debt of £5,500 on the hospital building, and the managing committee gratefully acknowledged £1,949 3s. 6d. in response, including £1,000 from the medical staff and lecturers, and £500 from Messrs. Claudius Ash & Sons. There was still a deficit of £5,700 in the extension account. A building committee had been appointed to carry out the necessary alterations.

On the resignation of Mr. Ibbetson, who had for many years held the office of hon. secretary to the committee, it was agreed to abolish the office, the energy and efficiency of the secretary, Mr. Pink, rendering it unnecessary. During the year a successful dinner had taken place in honour of the Jubilee. The committee reported with regret the loss by death of three vice-presidents: The Rt. Hon. Lord Kinnaid, Sir George Burrows, Bart., and the Right Hon. A. J. B. Beresford Hope, M.P. They had the pleasure to announce that His Grace the Archbishop of York had accepted the office of vice-president.

The report of the medical committee was then read, in which a satisfactory account was given of the year's work. During the year Mr. Claude Rogers had been elected on the senior staff, *vice* Mr. Arthur Underwood (resigned), and Mr. Lloyd Williams had succeeded Mr. Rogers on the junior staff. Mr. Samuel Cartwright had resigned the post of treasurer to the school, which he had held ever since its foundation. His loss was deeply regretted, and Mr. R. H. Woodhouse was unanimously elected by his colleagues to fill this important office.

After the reading of the reports the CHAIRMAN rose and addressed the meeting. He explained that the occasion was a special one. The hospital had probably assumed a form which would prove final for sometime to come. It had begun its existence on the 1st of December 1858, both as a charity and as an educational institution. With the latter view it had been organised by the Odontological Society as the necessary complement of the dental department at the College of Surgeons. He remembered how Sir John Tomes, who had devoted himself to the conduct of the negotiations, had guaranteed that if the college would establish a dental department, the Society would found a school and hospital. He (Mr. Rogers) had held office both at the College of Surgeons and at Leicester Square, and was in a capacity to say that both as a school and as a charity the Dental Hospital amply fulfilled its purposes. As a charity it was for the

suffering poor, as a school for the *suffering rich*, for it was here that the future practitioner was trained. Mr. Rogers then compared the condition of the hospital when first founded with that at present existing. Then the staff consisted of six dental surgeons attending each one day in the week, from 8.30 till 9.30 a.m., and four lecturers. The first patients had to be procured by one of the staff, Mr. Hepburn, visiting all the poor schools and police offices. He then read extracts from a letter from their first student, Mr. Forsyth, describing the state of affairs, there were only two operating chairs, rarely more than three or four patients and sometimes none, stopping and extractions all done in one room, and of course no such thing as anæsthetics. Now the staff consisted of six dental surgeons, four lecturers, six assistant surgeons, four anæsthetists, two assistant anæsthetists, a demonstrator of cohesive, and one of non-cohesive filling, a medical tutor, a house surgeon, two assistants and a deputy assistant house surgeon, a curator of the mechanical laboratory, and last but not least, a dean. The present number of pupils was about 85; of operating chairs 48; of patients (in 1887) 32,235, *i.e.*, over 100 per diem. Lastly, following the lead of medical teachers, the authorities had set about organising a post-graduate course, which if the greatest care were exercised to provide the most efficient teaching, he predicted would be of benefit to both practitioners and school. These great results had not been attained without great and unselfish labour and devotion on the part of many, among whom his own father Mr. Arnold Rogers had been a constant and earnest worker for the cause. The public had been generous in its support, and he could not refrain from mentioning the name of a benefactor without whose munificent aid the hospital would not have attained its present condition in our generation, namely Sir Edwin Saunders.

Sir EDWIN SAUNDERS then moved a vote of thanks to the chairman. After thanking Mr. Rogers for his able and interesting address, he expressed himself as specially gratified at this last addition to the building, he regarded it as the crowning of the whole work, and the completion of the hospital which was now symmetrical and practically perfect. The recent changes had been due to the enthusiasm of the dean (Mr. Morton Smale), and Mr. Hutchinson, and it was doubly gratifying as an evidence to those who had laboured in former days to raise the edifice that the younger generation inherited their enthusiasm.

The vote of thanks was seconded by Mr. SIBLEY, and carried by acclamation, after which those present adjourned to examine the new buildings. The additions to the hospital consist of an enlarged stopping room with twelve new chairs, a new lecture theatre with raised tiers of seats for 200 students, a new waiting room, a new anæsthetic room, new lavatories downstairs, an enlargement of the museum. Several distinguished guests of both sexes were present, and the tour of inspection was exceedingly interesting.

MINOR NOTICES AND CRITICAL ABSTRACTS.

Paralysis of the Fifth Cranial Nerve,*

Delivered at King's College Hospital, December 5th, 1887.

By DAVID FERRIER, M.D., F.R.S.,

PHYSICIAN TO THE HOSPITAL.

(Continued from p. 129.)

THE symptoms in the case which I have just read are such as can be only caused by some lesion which has impaired the continuity of the trunk of the fifth nerve, both sensory and motor divisions—at first absolutely, and now in process of being recovered from. Recovery has first taken place in the third division of the nerve. In favour of the peripheral nature of the lesion is the atrophy with loss of faradic contractility of the muscles of mastication. For though, theoretically, a similar condition might be caused by destruction of the motor and sensory nuclei of this nerve, such a lesion could not exist without causing other and far-reaching disturbances, which are here entirely absent. What has been the exact cause of the lesion is not altogether free from doubt. The fifth nerve is not unfrequently implicated in tumours, inflammations, syphilitic and otherwise, and injuries affecting the middle fossa of the skull. As a rule, the lesion which destroys the fifth also implicates other of the adjoining cranial nerves. In favour of the traumatic origin in this case is the fact that the symptoms began directly after the receipt of a severe injury to the head; and that such an injury may cause paralysis of the fifth is proved by one or two similar instances on record. A typical one of the kind has been reported by Rig-

* From notes [revised and amended] by Sir Hugh Beevor, M.B., Medical Registrar.

ler, quoted by Romberg. There is no evidence of intra-cranial tumour in this case ; but syphilis, such a fertile source of disease of the cranial nerves, must be considered as a possible cause, even though denied by the patient, and this more particularly on account of the existence of a suspicious perforation of the soft palate. It may be that both factors have been at work—viz., a predisposition induced by syphilis, with the traumatic injury as the exciting cause.

Considering the complete paralysis of all the muscles supplied by the fifth nerve, which are accessible to direct investigation it is probable that the whole of the motor division has been destroyed. Therefore the case has an important bearing on the question of the innervation of certain other muscles which are supposed to derive their motor supply directly or indirectly from the fifth. It is usually taught that the motor division of the fifth nerve supplies the azygos uvulæ, as well as the tensor palati and the tensor tympani. If this were so it would have been reasonable to expect indications of abnormal position or action of the palate. In particular, the right arch of the palate should have been higher than the left, owing to the unantagonised action of the levator. The perforation on the left side of the palate made it difficult to determine what position the uvula would have assumed had this not existed ; but no abnormality in the position or action of the soft palate could be detected.

This case, therefore, lends no support to the usually accepted doctrines respecting the innervation of the palate by the fifth nerve ; nor are these in accordance with the facts of recent experimental research. Vulpian* has found in dogs that no movements are induced in the palate by irritation of the roots either of the fifth or facial nerve. But, on the other hand, movements of the soft palate are produced by irritation of the spinal accessory or accessorio-vagus. That the spinal accessory is a motor, if not the only motor, nerve of the palate is also supported by similar experiments by Beevor and Horsley on monkeys.

It is clear, therefore, that the whole subject of the motor innervation of the palate, and the current theories respecting the affections of the palate, in relation to disease of the fifth and facial nerves, require reconsideration and revision. Similar remarks apply with regard to the tensor tympani. It is said by Lucae that whe

* Comptes Rendus, ciii., 1886.

the tensor tympani is paralysed there is in the affected ear abnormal acuteness to high notes and subjective deep roaring sounds. Neither of these conditions exists in this case, and we are therefore bound to conclude (supposing the whole of the motor division to be destroyed) that the tensor tympani is not supplied by the fifth nerve, or that the symptoms described by Lucae are not necessarily present in such cases.

You will remember that the sense of smell was somewhat defective in the right nostril. But this is to be attributed not to any direct lesion of the olfactory nerve proper, but to the affection of the mucous membrane of the nostril associated with total loss of common sensibility. The condition is somewhat like that which led Magendie to regard the fifth nerve, and not the first, as the true nerve of smell.

The state of the right eye is one which deserves special consideration. There are signs of old keratitis, general vascular congestion, and adhesions of the iris, which do not give way to repeated applications of atropine. From notes obtained by Professor McHardy from Mr. Lang, under whose care the patient was for some time, the keratitis undoubtedly preceded the iritis. At the time of his first examination there were no traces of previous iritis; and this is an important fact which serves to show that the iritis in this case is not a relapse of an antecedent, probably specific, iritis, but a further stage of the same affection which manifested itself first in inflammation of the cornea. The condition is therefore more than probably an example of what is termed neuro-paralytic ophthalmia—an affection which has been frequently observed, both in animals and in man, as the result of lesion of the fifth nerve. As to the proximate causation of this ophthalmia, several theories have been advanced. According to some, the inflammation of the eye is the result merely of the anæsthesia of the cornea, and due to external influences acting on a part unaware of, and therefore unable to guard against, the irritation to which it is liable. But this theory is opposed by many facts. The eyeball may be perfectly insensible, as in cases of cerebral hemi-anæsthesia, and yet no inflammation occur. And similar inflammation of the eyeball has been known to occur in cases of lesions of the fifth nerve insufficient to produce complete loss of sensibility. Nor even when the anæsthesia from lesion of the fifth has been complete does inflammation necessarily ensue. Thus a case has been reported by

Mr. Hutchinson,* in which, notwithstanding entire insensibility of the eyeball from paralysis of the fifth nerve, no inflammation of the eye occurred during the period of observation (twelve weeks) that had elapsed from the commencement of the affection.

On the other hand, in some cases panophthalmitis occurs with such rapidity, after lesion of the fifth, as to be comparable only to the acute bed sore, which is seen in connection with certain forms of spinal and cerebral disease. Nor can the inflammation be explained by mere paralytic dilatation of the bloodvessels of the eyeball. Indeed, it has been shown by Sinitzin that not only does the paralytic dilatation of the vessels of the eyeball, caused by the section of the cervical sympathetic, not induce ophthalmia, but actually prevents the ophthalmia which would otherwise result from section of the fifth. We are obliged, therefore, to regard the neuro-paralytic ophthalmia as dependent upon a direct influence of the ophthalmic division of the fifth nerve on the nutrition of the eyeball itself, altogether apart from vascular or other conditions.

The inflammation of the eye after lesion of the fifth nerve is, in fact, generally appealed to as a proof of the existence of special trophic nerves. These are supposed to run in the inner side of the nerve, inasmuch as lesions in this region are more apt to result in the trophic disturbances described. I am of opinion that the direct influence of the nervous system on the nutrition of the parts to which they are distributed, has been abundantly demonstrated. But I am not prepared to admit that there are any trophic nerves, as such, distinct from those which minister to motion, secretion or sensibility. Trophic disturbances are well known in connection with lesions of sensory nerves in various parts of the body. But the facts are in favour of the theory that these are in all cases associated with irritative or inflammatory lesions of the nerves in question. Partial injuries of a nerve are more apt to cause irritation than complete section; and inflammatory disturbances are certainly more frequently seen in such cases than in those in which the nerve has been completely severed. There is evidence in this case that the fifth nerve is the seat of acute irritation. We have, in fact, a typical example of what is termed *anæsthesia dolorosa*. The patient is subject to continual paroxysmal darting pains in the region of distribution

* Ophthalmic Hospital Reports, vol. iv., p. 191.

of all three branches, and particularly in the eyeball, which he describes as being the seat of intense burning pain in the back part. Indeed, you can easily see that the patient's account is correct, for he is constantly in the habit of starting suddenly and wincing each time a paroxysm of pain shoots through his eye and the right side of his head and face. This condition has lasted throughout the whole course of the affection. We have, therefore, good reason for supposing that the neuro-paralytic ophthalmia consequent on lesions of the fifth nerve is, as in the case of the other sensory nerves, specially caused by irritative or inflammatory conditions, and not by the mere cutting off of the parts from the influence of special trophic centres. For if the latter were the case, neuro-paralytic ophthalmia ought to result invariably from complete paralysis of the fifth; whereas Hutchinson's case, as well as others that might be quoted, is distinctly contradictory of such a hypothesis.

We come now to the consideration of a much debated question on which this case has an important bearing—viz., the origin and course of the nerves which minister to the sense of taste in the anterior two-thirds of the tongue. That the glosso-pharyngeal is the special nerve of taste of the posterior third of the tongue and neighbouring regions has been abundantly proved both by the facts of disease and experiments on the lower animals, and it has been found that the circumvallate papillæ undergo atrophy when the glosso-pharyngeal nerves have been divided. A curious case, however, has been recorded by Gowers* of anæsthesia of the fifth nerve (supposed to have been caused by a lesion near the pons), in which the sense of taste was abolished, not only in the anterior two-thirds, but also in the posterior third of the tongue and neighbouring region—a case which would seem to show that all the nerves of taste may occasionally run in the trigeminal nerve. If we assume it as proved that the loss of taste over the whole of one side of the tongue was due to uncomplicated lesion of the fifth nerve in this case, we must regard it as certainly an exception to the ordinary rule. But while it is certain that in cases of paralysis of the fifth nerve there is loss of common sensibility in the right side of the tongue and mouth, and in a large proportion of cases, in addition to the anæsthesia of the mouth and tongue, also complete loss of taste in the

* Journal of Physiology, vol. iii.

anterior two-thirds, there are other cases on record which seem to show that this is not universal. Even those who hold with Erb and others that the nerves of taste of the anterior two-thirds of the tongue ultimately join the trunk of the fifth nerve, are nevertheless of opinion that the lingual division of the fifth nerve does not contain gustatory fibres until after its junction with the chorda tympani. And it is believed that the chorda tympani is, in reality, the path of the gustatory nerves in question. In favour of this view, many facts, both of experiment and disease, have been adduced. Section of the chorda tympani in animals has been said by Bernard, Lussana, and others to impair, if not entirely to abolish, taste in the anterior two-thirds of the tongue. Bernard, however, was of opinion that this was only an indirect consequence of the paralysis of the papillæ induced by the lesion. But this explanation has not been adopted by all, and Schiff, among others, holds that the chorda tympani in reality contains afferent gustatory fibres. In favour also of the relation of the chorda tympani to the sense of taste in the anterior two-thirds of the tongue are the facts of facial paralysis—more particularly when the lesion—as in disease of the middle ear—is such as to impair the continuity of the facial nerve between the geniculate ganglion and the origin of the chorda tympani. Many such cases have been reported, so that we can scarcely question the accuracy of the observations. You will then naturally ask how the fibres of the chorda tympani ultimately join the trunk of the fifth nerve? The path indicated by Schiff certainly seems of a very roundabout character. You will be able to follow it in the diagram before you. Schiff believes that these fibres pass from the geniculate ganglion through the greater superficial petrosal nerve to Meckel's ganglion, and thence to the infra-orbital or second division of the fifth, and so to the general trunk of the nerve; while other fibres, perhaps, pass through the lesser superficial petrosal to the otic ganglion, and thence to the lingual nerve or third division of the fifth. If Schiff's views are correct, it ought to follow that extirpation of Meckel's ganglion, or section of the second division at the foramen rotundum, should cause abolition, or at least considerable impairment of the sense of taste in the anterior two-thirds of the tongue. But this has been denied by Prevost, Alcock, and other experimenters on the lower animals, and it is also contradicted by cases in which the second division of the fifth has been divided and Meckel's ganglion

extirpated for obstinate facial neuralgia. In illustration of this I may mention a case recently under the care of Dr. Hughlings Jackson and myself at the National Hospital for the Paralysed and Epileptic. In this patient the second division of the fifth was divided just outside the foramen rotundum, Meckel's ganglion more or less completely extirpated, and subsequently some of the descending palatine nerves also divided. Yet in this patient there was no affection of taste on that side of the tongue. In corroboration also of this, it may be stated that in the patient before us at the time when taste and tactile sensibility began to return in the anterior two-thirds of the tongue, there was still almost absolute anæsthesia of the first and second divisions of the nerve, indicating that conduction was still blocked in these branches—a condition practically equivalent to experimental section. There would still, however, according to Schiff's view, be a way open from the chorda tympani to the otic ganglion, and so into the inferior division of the fifth. The facts of this case would seem to require either this route for the gustatory fibres to the anterior two-thirds of the tongue, or a direct course in the lingual nerve itself. Lussana, Duval, Vulpian, and others hold that the course of the gustatory fibres of the anterior two-thirds of the tongue is through the chorda tympani, and thence directly into the nerve of Wrisberg or pars intermedia of the seventh nerve. The case before us is not in harmony with this view; for there is no indication of affection either of the portio dura, or of the portio mollis of the seventh nerve. Nor does it appear that lesions of the seventh nerve between its point of origin and its entry into the internal auditory meatus cause any impairment of taste in the anterior two-thirds of the tongue. And yet we can scarcely suppose that the pars intermedia would escape when the other two divisions have been destroyed. There is still another view respecting the course of the gustatory nerves of the anterior two-thirds of the tongue, which has found considerable acceptance among physiologists. This is the view propounded by Carl,—viz., that all the gustatory fibres are derived primarily from the glosso-pharyngeal:—those of the base of the tongue directly, and those of the anterior two-thirds of the tongue indirectly, through the anastomoses which the tympanic or Jacobson's nerve forms with the facial and with the lingual through the otic ganglion. This view, which seems to be supported by the facts of his own case, has the merit of simplicity, inasmuch as all

the nerves of taste are thus brought ultimately to one nucleus but it is not in harmony with the facts observable in this patient or in the other recorded cases of loss of taste in the anterior two-thirds of the tongue from lesion of the fifth nerve alone apart from all discoverable affection of the glosso-pharyngeal nerve. Nor does it seem necessary, though the nerves of taste all proceed ultimately to one cerebral centre, that the primary nuclei should be united; for the distinctness of the medullary nuclei may be subservient to different physiological combinations in relation to the secretion of saliva, the movements of the tongue, and the act of deglutition. Such are a few of the considerations suggested by the case before us; and you will not fail to recognise that there are still many questions which demand further careful investigation when similar instances present themselves before you.

[*Addendum note.*—December 23rd: Under the influence of iodide of potassium in twenty-grain doses, three times a day, and faradisation of the right side of the face, the patient has continued steadily to improve, and the area of total anæsthesia has become circumscribed to the eyeball and eyelids. Everywhere else tactile sensibility has returned more or less completely, but with difficulty of localisation and a considerable amount of analgesia remain, especially in the frontal region. Paroxysmal pains still shoot through the eyeball, but the eye is less congested, and there are some indications that the adhesions of the margins of the pupil are giving way, partially at least, to the daily use of atropine. Should they still resist, the question will arise as to the advisability of performing iridectomy; but my colleague Professor MacHardy, thinks it better to wait for the present.—*The Lancet.*

REVIEWS.

MR. RYMER'S "Note Book for Dental Students" (J. and A. Churchill), is intended for use just prior to examinations. It makes no pretence to teach either anatomy or physiology, its simple object being to serve to recall to the mind names and facts already learnt. Volumes of this class stand to the student in some such relation as a portmanteau does to the traveller, and the utility depends on much the same considerations as govern the

value of that useful article. The capacity of such books is necessarily limited, and unless the packing process is done judiciously, they appear to contain everything but the thing actually required. One important art in the arrangement of such works is "the art of leaving out." They should contain nothing that is unnecessary, whether as not being required, or as being among the things which once learnt are not likely to be forgotten. In this respect Mr. Rymer's volume is a success. Occasionally we find a little space taken up with information which can scarcely fail to be in the reader's possession, and the first half page is an instance of this. It is occupied with the naming of the three parts of a tooth—crown, neck, and root—and the explanation of terms so much in common use as mesial and distal, lingual and labial. There are, however, very few lines of the book thus taken up, and the author is on the whole as happy in his choice of matter as in his arrangement of it. The main facts in connection with the tissues are stated with clearness and brevity, so that any student who has given attention to his lectures or his manual will find the whole subject recalled to his mind by these notes in orderly succession. In the part devoted to the development of the teeth very few ascertained facts are omitted, and very few unestablished statements allowed place. The subject of the distribution of teeth in the animal kingdom occupies a space which seems a little disproportionate to the size of the volume. But here, where differences are many, and the recollection of them very much a matter of memory, there is, perhaps, wisdom in lengthening the catalogue of facts. It may safely be affirmed that the volume is well filled, and that the contents are of general utility.

NEW INVENTIONS.

Court Plaster.

WE have received from Mr. Mather, of Manchester, several samples of court plaster which we have tested in various ways, and which we find to possess in a marked degree the qualities essential in such material. They are thin and adapt themselves very readily to inequalities of surface, and their power of adhesion equals, if it does not exceed, that of other plasters with which we are acquainted. There are several colours, but in point of adhesive power the black is greatly to be preferred. All of them will, however, be found suitable for those occasional uses to which this material is sometimes put by members of our profession.

ANNOTATIONS.

By the time that this issue reaches the hands of our readers, it is highly probable that the Register for 1888 will have been issued. We trust that members will at once provide themselves with copies. We hope in our next issue to be able to give some interesting and encouraging statistics regarding the present condition of this important record.

A CURIOUS circumstance has arisen out of the courtesy of the Registrar in allowing a list of registered students to be appended to the Register. It appears that some practitioners, on being remonstrated with for not having registered, have actually referred to the presence of their names on this list, as evidence of registration. Thus a civil act of accommodation has turned to the detriment of the Register. When will the whole profession see the importance of this question of registration? We publish for the second time the important notice (see p. 152) issued by the Registrar, and we trust that it will bear fruit.

ON page 162 will be found the balance sheet of the Association for the year 1887, and to many of us it will prove the most interesting as well as the most gratifying page in the Journal, showing as it does a very satisfactory increase of income, and an equally satisfactory decrease of expenditure. With regard to the general account, we find that the income for 1887 amounts to £23 9s. more than that of 1886, whereas the expenditure in 1887 was £75 15s. less than that of 1886. Turning to the Journal account, we find a reduction of expense of £32 12s. 8d., and an increase of income of £78 2s. 3d. The amount received for advertisements is the highest we have yet recorded—£255 os. 9d. being £59 4s. 4d. more than the receipts of 1886, and this fact testifies to the growing estimation and rapidly-increasing circulation of the Journal, and we trust to see a still greater increase in 1888. The total increase of income over 1886 is £101 11s. 3d.; the total reduction of expense £108 7s. 8d.; in other words the balance sheet shows a balance on the year of £125 14s. 8d., as against a deficit on the previous year of £84 4s. 3d.—an improvement, therefore, of £209 18s. 11d. It is a pleasant reflection that this happy result has been due to a combination of sound economy and advancing income, and that these factors will continue to

operate so that the next balance sheet will in all probability show a still more satisfactory result.

THE hon. secretary of the Association desires us to draw the attention of the secretaries of the various branches to the fact that the five first names on the list of provincial members of the Representative Board will be removed (by rotation) at the coming annual meeting, and that their places will have to be filled up. To facilitate the steps that must be taken by the branch secretaries to arrange the election of fresh representatives, we subjoin the following extract from bye-law 18, which deals with the matter. "Members resident in districts or in towns fully represented by branches of the Association shall be nominated by such branches of the Association, at the request of the Representative Board; the nominations to be forwarded to the hon. secretary not less than one month before the Annual General Meeting. Retiring members of the board shall be eligible for re-election."

THE plans for the coming annual meeting in Ireland, as far as they have been laid before us, are promising in the highest degree. The secretary and those who act with him seem determined to leave no stone unturned to make the event redound to the credit of the emerald isle and to the credit of the Association and the profession to boot. The museum is to be a great feature and the local committee have secured the co-operation of various energetic spirits in the provinces to forward the scheme, so that the interest may be widely spread, and representatives from all quarters may be brought into immediate contact with those actually engaged in arranging the meeting. Many gentlemen have already promised their assistance, and the list of volunteers includes representative men from London and the provinces. There will be a fair field and no favour for the exhibitors seeing that the various spaces will be drawn by lot, the room however is so good that we may safely say there is not a bad place in it.

WE shall not probably publish any programme or announcement with regard to the papers until May. Touching the question of papers, it has been felt for a long time that an immense amount of time is wasted in the reading of papers, which are of a nature that cannot fairly be understood or appreciated, much less

discussed, at a moment's notice. An author devotes months and perhaps years to the study of a subject and then pours the result of his careful labour into ears that cannot keep pace with him; the audience who may here and there have caught a sentence or two, and fixed it, deliver desultory impromptu criticisms of matter which they have not had a fair opportunity of digesting, to the infinite fatigue of all and the benefit of none. With a view to remedying this unsatisfactory state of things, it has been proposed to deal with long and abstruse papers in a different manner in the future, namely to print them and circulate them beforehand among those members who may be supposed to be likely to discuss them, and then to read them in the form of a ten minutes abstract. By this means facilities will be afforded for a really valuable and thoughtful discussion and a great deal of time will be saved.

WHILE we are upon the subject of papers, we think it would be a good thing that an outline or scheme of each paper should be submitted to the authorities beforehand, because with a large Association like ours, it has become necessary to exercise some sort of censorship over the papers to be read at the annual meetings; this is the custom in almost every other learned society, and its adoption would we think tend to raise the tone of the work done. The limited time at our disposal, coupled with the rapidly increasing number of our active members, point to the necessity of adopting some method of selection of material as well as some machinery for economising our time.

MR. A. H. CORLEY, the President of the Royal College of Surgeons in Ireland, has been invited to contribute a paper on the administration of ether in Dental Surgery, and we have no doubt that the advocates of chloroform will wish to debate its claims. The subject is full of interest, and will afford an excellent opportunity for a good debate. Both the authorities of Trinity College and those of the Royal College of Surgeons in Ireland have voluntarily offered to place their buildings at our disposal, an honour which we believe is very rarely granted to any visitors, however distinguished. The indefatigable secretary of the Irish branch seems to have forgotten nothing, and even the railway tickets are to be specially cheap, and the accommodation specially supervised, if members will co-operate with him by intimating at

an early date their intention to be present, and the date of their journey. We also hear rumours of excursions for the ladies of the party, while the sterner sex are occupied in listening to and discussing papers. They will be brought back each day to meet the members at a general lunch. We believe that our entertainers have exercised great self-denial in foregoing their inclinations towards individual hospitality, and have decided to provide a general lunch at a nominal price. Altogether, the arrangements, so far as they have transpired, justify us in predicting that the coming annual meeting will beat the record in most respects, if not all. We shall have more news about the meeting and arrangements in the next number.

THE first annual dinner of the Dental Hospital Athletic Club took place at the Holborn Restaurant. This entertainment, which at first seemed of doubtful success, assumed under the energetic direction of the dean of the hospital, and of Mr. Colyer, the house surgeon, a magnitude and importance which was not anticipated. About a hundred and five gentlemen sat down to dinner, under the presidency of Sir E. Saunders, and the following were observed amongst the visitors: Mr. Sibley, chairman; Mr. Phillips, vice-chairman of the Managing Committee of the Dental Hospital; Mr. Bloxam, of Charing Cross Hospital; Professor Cullingworth, late of Owens College, Manchester, who has been elected to fill the post of Obstetric Physician at St. Thomas's Hospital; Dr. Andrew Miller; Mr. Morgan, of Charing Cross Hospital; Dr. Pollock, of Charing Cross Hospital; Professor Schäfer, of University College; Mr. Shield, of Charing Cross Hospital; Mr. Stonham, of University College, and Mr. Bland Sutton, of Middlesex Hospital. All the students, with the exception of some half dozen, and nearly all the staff, were present. There was some excellent music, contributed mostly by the present and past students of the hospital, and a few very appropriate and suggestive speeches from Mr. Sibley, Dr. Pollock, Mr. Bloxam, Professor Cullingworth, Mr. Bland Sutton, Mr. Smith Turner, Dr. Walker, Mr. Smale, Mr. T. Hutchinson, and Mr. Phillips. Sir E. Saunders was particularly felicitous as chairman, and the Athletic Club is no doubt much indebted to him for his kindness in presiding.

THE following paragraph from a recent number of *The British Medical Journal* is so *apropos* of our own recent writings, that we

cannot refrain from printing it: "The gullibility of the public has seldom been rendered more evident than in the ease with which they are fleeced by empirics who trade on the unknown potentialities of electricity. A few pieces of feebly magnetised clock spring sewn into flannel or leather constitute a magnetic appliance which is advertised to cure most of the ills of suffering humanity. Pieces of metal welded together in defiance of the most elementary laws of electric science are credited with powers for good beside which the elixir of life itself would pale. As the prices asked and received for such articles from a confiding public are calculated, not on the cost of production, but on the claims of their introducers, this department of industry is about the most remunerative yet discovered, and success has brought numerous rival magneticians and electricians into the market, who vie with each other in the audacity of their assertions. What one regrets is, perhaps, less the fact that the public are induced to part with their money—*populus vult decipi*—but that discredit is thereby brought on what promises in the future to be a very useful branch of therapeutics."

In an article in our January number discussing popular credulity, we spoke of witchcraft as an obsolete superstition; but that the belief in such occult powers still lingers among certain classes is shown by the following case, which serves also to illustrate the mental condition of a section of the masses who furnish numerous victims for all sorts of medical quackery: "A case of alleged witchcraft came before the Totnes magistrates. A cab proprietor summoned his son for threatening his life, and accusing him of bewitching his son's daughter. In his defence the son said his father had bewitched his daughter, the result being that she suffered for months with chronic disease in the arms. He took her to several Plymouth doctors, and spent over £50 in endeavouring to have her cured. She next went into a hospital where it was advised that the arm should be amputated. He refused to allow this, and took her to a 'whitewitch,' who said she was overlooked by her grandfather. The 'whitewitch,' however, soon cured her. The case was dismissed."

BRADFORD AND DISTRICT DENTAL ASSOCIATION.—The Annual Business Meeting was held on the 10th of February, in the Eye

and Ear Hospital, Bradford. In the absence of the President, Mr. A. Cocker, L.D.S.Edin., was voted to the chair. The treasurer's report showed the Association was in a very healthy condition, there being a good balance in hand. The work of the Society during the past year has been of a very practical and interesting character. The following papers have been read:—"Hæmorrhage and its Treatment," by Mr. A. Cocker, L.D.S.Edin.; "Notes on Cocaine," by Mr. A. B. Wolfenden, L.D.S.I.; "The Treatment of Pulpless Teeth," by Mr. A. Alexander Matthews, L.D.S.Eng.; while many valuable and interesting communications have been contributed by Messrs. A. Howard, A. A. Matthews, T. B. Barnby, J. Taylor, C. Rippon, I. Renshaw and others. The retiring officers were thanked for their services on the motion of Mr. J. H. Bottomley, L.D.S.Glas., seconded by Mr. J. Taylor, L.D.S.Edin. The Election of officers for the year 1888 resulted as follows: *President*—Mr. G. J. Kirk, Bradford. *Vice-President*—Mr. A. M. Matthews, L.D.S.Eng., Bradford. *Treasurer*—Mr. T. B. Barnby, L.D.S.I., Bradford. *Secretary*—Mr. A. B. Wolfenden, L.D.S.I., Halifax. *Committee*—Mr. Arthur Cocker, L.D.S.Edin., Halifax; Mr. C. Rippon, L.D.S.I., Huddersfield; Mr. J. Taylor, L.D.S.Edin., Dewsbury. Mr. A. Howarth, L.D.S.Eng., then read a very interesting paper on the "Care of the Teeth of Children," and was heartily thanked. The proceedings ended with a vote of thanks to the chairman.

BIRMINGHAM DENTAL STUDENTS' SOCIETY.—A meeting of the Dental Students' Society took place on February 22nd. Mr. W. Palethorpe in the chair. Amongst those present were the following:—Messrs. C. Sims, E. S. Sims, G. F. C. Matthews, W. J. Whittall, G. Foster, and P. T. Naden. Mr. Egerton Sims read a paper entitled, "A Description of the Permanent Teeth," in which he pointed out the difference in their size and shape, also the variation in size and position of the cusps of such teeth as the molars and bicuspid. A number of specimens were shown, among them being one of the superior and inferior maxillary bones, exhibiting the teeth as they appear in the normal state, the roots of the teeth in the alveolar process being presented to view by a vertical section of the bone. At the termination of the paper a discussion ensued. The secretary exhibited models of cleft palate; some remarks were then made as to the best kind of rubber to be used in those cases in which the soft palate was

deficient. Mr. W. Palethorpe promised a paper on "Alveolar Abscess" for the meeting in March, and it was decided to have on the same evening after the ordinary business a social meeting of the members.

It is cheering in these times of depression to hear of any new opening for human energy. We are delighted, therefore, to learn that the body of veterinary surgeons have a great opportunity before them if only they prove equal to it. An American is said to be making great progress in the manufacture of artificial teeth for horses. Being an American, he of course works on the very latest methods, and—*cela va sans dire*—improves even on them. Younger's operation has been tried on human beings in only a hesitating and tentative fashion, but the Yankee "takes the bull by the horns," or (to adjust the saying to the fact) the horse by the mouth, and does for the noble steed that which has not hitherto been accomplished either for the noble savage or his more civilized brother. "The horse's teeth were pulled out one by one, and in the cavities new teeth were inserted. They were literally cemented in, and, although the gums were sore for a week, they finally hardened, and now give the animal no pain. Filling horses' teeth and cleaning them are common things now, and in a few years the practice will be all the rage," &c.; &c. First implantation, crown and bridgework will doubtless follow. Happy equine race, happy also the profession that will minister thus to its needs! Yet not wholly happy, for may not—thought too dread to contemplate!—the veterinary surgeon of the future have his soul vexed with the question whether a dental "vet." ought to be a general practitioner before he is at liberty to apply his skill to the interesting speciality created by this American for the benefit of his four-footed clients.

WE copy from the *Lancet* the following interesting case of intra-uterine dentition. Señor Llorens recently attended a woman in humble circumstances in Barcelona during a premature confinement at six months. The child had already cut the four incisors and the two lower canines. Had the woman gone her full time the dentition would have been probably much further advanced. The original report appeared in the *Boletín Clínico* of Lorida.

CORRESPONDENCE.

We do not hold ourselves responsible for the views expressed by our Correspondents.

**Hyperæmia ;
Or the First Stage of Gangrene of the Pulp.**

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—With reference to the interesting case related by my friend, Mr. James Rymer, in your last issue, which he believes to be a case of hyperæmia of the pulp, will you allow me space to discuss the diagnosis of what he admits to be "a rather obscure case."

I am quite aware that cases of hyperæmia of the pulp without caries may occur, but the evidence adduced by Mr. Rymer in his paper is, to my mind, hardly conclusive that it occurred in this particular case, and the facts given seem to me to be capable of a different interpretation.

The patient in the first place was treated for a fistulous chronic abscess in connection with a decayed second right upper premolar by means of stimulating injections, and after two visits the root canal was filled with paraffin wax, and the carious cavity stopped. Up to this time no pain is mentioned in connection with the first right upper premolar, but *after* this treatment the patient feels considerable pain which he refers to the contiguous first premolar, and about a week after again consults his dentist. A superficial metal filling is removed from the first premolar without relief, and then "as a last resource," no cause of reflex pain being discernible, Mr. Rymer drills into this "*healthy* premolar," and two drops of pale blood quickly escape when the pulp is reached.

Now, sir, I do not see that the history of the case up to now justifies any diagnosis of hyperæmia of the pulp, and I should like to ask Mr. Rymer if the tooth was unusually sensitive to heat or cold, and whether it or the second premolar was painful on percussion?

This tapping seems to have given temporary relief, and the tooth was treated with an iodoform and creasote dressing. The patient returned in two days and insisted upon its extraction, which was done. Mr. Rymer asks "how could inflammation have come about in a perfectly healthy tooth, without any apparent external lesion?" and he and his medical friend and patient answer "that the vessels of the first and second premolars must have been in such close continuity, the vessels of the first bicuspid must have become blocked with inflammatory matter, which led to congestion and inflammation of the pulp."

A perfectly reasonable theory, but the question that puzzles me, is why the symptoms of pain in the first bicuspid should have arisen *after* the chronic inflammation at the apex of the second bicuspid

had been treated and presumably subdued, and not *before*, when one would expect the products of inflammation, both mechanical and chemical, to have exerted greater force. *Primâ facie*, the symptoms seem to me to be equally well accounted for on the supposition that they were due to the permanent stopping of the second upper bicuspid root, giving rise to periostitis of a possibly temporary character, and that the relief gained firstly by the tapping, and secondly by the extraction of the neighbouring tooth may have been gained by these operations acting as strong counter-irritants, &c.

With regard to the microscopical examination I fail to find the least proof of hyperæmia in the first, and the second can only demonstrate the effect of iodoform and creasote on an exposed nerve.

Hoping these few comments on an extremely interesting case will elicit further detail from Mr. Rymer, in order to relieve me of my doubts as to the diagnosis, as completely as he has relieved his patient of pain,

I remain, yours truly,

MORGAN HUGHES, M.R.C.S., L.D.S.Eng.

Dental Journalism.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—Mr. Rees Price makes much ado about nothing. My use of the words Journal Committee, instead of Publishing Committee, was an obvious slip affecting my argument not one jot. The opinion of Mr. Rees Price as to the influence on the editor of the committee, and *vice versa*, is not of much value, being founded on imagination and not on experience of the committee, to which he does not belong. Members of the committee are all constantly gathering information from one source and another, as to the opinions of the mass of the profession, and when at the meetings questions are broached, they are able in many cases to give information which does keep the editor in touch with members. Of course they on their side gain much information from the editor; and thus from the multitude of counsellors cometh forth the wisdom in which we have our monthly feast.

Mr. Rees Price doubts whether "too vigorous expression of opinion, even of a majority, is in the best interests of the profession as a whole;" but he considers that hitherto "the editorial work of the Journal has been done with singular ability and judgment." That the editor has tried to conciliate rather than to stir up strife, even under great provocation, is evident from recent events. He has not replied himself, and he has persistently discountenanced in others, the use of strong terms in reply to deliberately uttered and reiterated statements, in which shameful aspersions have been gratuitously cast upon the honour of the leaders of our profession; men who have worn the white

flower of blameless lives in that fierce light which now-a-days beats upon all men in public positions. When Mr. Rees Price speaks of "hard hitting" he should therefore bear in mind the occasion for it, and consider whether it is always desirable to allow hard hitting to be restricted entirely to one side. With regard to anonymous effusions Mr. Rees Price is, like some other members, apparently of opinion that there is always something inherently disreputable about anonymity. This is a mistake. The ethics of that question are tersely put by "X" in the last sentences of his letter in this month's Journal, and I thoroughly agree with "X."

Your obedient servant,

A COMMITTEE MAN.

London, *February 18th*, 1888.

The International Congress.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—I should like to add a few lines to Dr. Walker's excellent article which appeared in your last issue. "The dental student" he says, "in the American curriculum obtains no general, medical, or surgical clinical teaching, nor is there any well-organised plan of medical clinical instruction; no tutorial instruction at the bedside of the patient; in fact, the dental student is never associated or educated with the general medical and surgical student at a general medical and surgical hospital."

If Dr. Walker is referring to dental colleges as institutions where simply dentistry is taught, his remarks would need no comments, but as dental departments (in some instances called dental colleges) of universities now take so high a position in the dental world, I feel a few words would not be out of season.

The university of Harvard is the one I am most familiar with; here the dental student spends his first year in the medical school only, and receives the same lectures (anatomy, physiology, and chemistry) as the general student, and has to pass the same examination. Surgical pathology and surgery lectures are common to both. *The dental student has the privilege of attending any lectures given in the university.* With regard to clinical surgery and medicine, the dental undergraduate has access to the Massachusetts General Hospital, City Hospital, dispensaries, or special institutions free of cost. If a dental graduate quits this university without having a knowledge of general medicine and surgery, and having mixed with general medical students, it certainly is not for the want of opportunities.

I believe I am right in saying all dental departments of universities have a similar arrangement. The curriculum laid down in

these dental schools is nearly identical with that of our own. I am fully persuaded in my own mind that these institutions will take a preference over those colleges to which Dr. Walker specially refers.

Yours obediently,

WALTER HARRISON.

L.D.S. "Sine Curriculo."

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—It will interest registered dentists to know that it is still open to them to obtain the dental diploma *sine curriculo* at the Royal College of Surgeons, Dublin.

(a.) Any candidate who has failed is allowed to present himself again for exactly the same examination as the one for which he was unsuccessful.

(b.) Any registered dentist is subjected to the same examination as was in force during the years 1878 to 1884, inclusive, with only the addition of a practical examination in dental surgery and in dental mechanics.

(c.) Candidates *cum curriculo* are subjected to the extended examination mentioned by the regulations forwarded by the registrar to all intending candidates, without distinction as to classes *a, b, c*, above mentioned.

Having been present and seen the examination held on the 13th and 14th inst., when candidates were examined in these three separate classes, I can vouch for the complete accuracy of the above statements.

As an advertisement has been issued to the effect that the examination for the L.D.S. *sine curriculo* will not be held after the termination of the present year, 1888, I think it my duty to make the foregoing facts known to all registered dentists.

I shall be happy to give any further information to any intending candidate who desires it, on receipt of his card.

I am, yours, &c.,

J. W. DUNKERLEY, L.D.S.I.

NOTE--ANONYMOUS letters directed to the Secretary of the Association cannot receive attention.

P.O. Orders must be accompanied by Letters of Advice.

Communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

Subscriptions to the Treasurer, 40, Leicester Square.

All Contributions intended for publication in the Journal must be written on one side of the paper only. The latest date for receiving contributions for the current number is the 5th of the month.

Members are reminded that their subscriptions are due in JANUARY, and are requested either to remit them direct to the Treasurer, at 40, Leicester Square, or if more convenient, to pay them through their bankers, or through the agency of one of the Dental Depots, and so save unnecessary postage, &c., in applying for the same.

SPECIAL NOTICE—All communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

THE JOURNAL
OF THE
BRITISH DENTAL ASSOCIATION
A
MONTHLY REVIEW OF DENTAL SURGERY.

No. 4.

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VOL. IX.

The Dentists' Register, 1888.

ON the 21st of March the new Register was published, and may now be obtained at the General Medical Council offices, 209, Oxford Street, at any of the depôts, or of Messrs. Spottiswoode and Co., publishers to the Medical Council. Owing to the indefatigable exertions of the Registrar, Mr. W. J. C. Miller, it has been produced in a condition of general accuracy which has never been attained by any of its predecessors. Nor must we forget, while acknowledging the debt we owe to Mr. Miller for his labours in this direction, that these labours have been materially assisted by certain energetic members of the dental profession, and notably Mr. Waite, of Liverpool, who has taken a very active part in promoting a livelier

interest in the matter among his brethren, and has devoted himself with his accustomed energy to the task of assisting the registrar. That so much urging and spurring were needed to rouse dentists from their singular apathy concerning registration is a very discreditable fact, and it is indeed disheartening to discover that a not inconsiderable number of newly-qualified licentiates are so blind to their own interests, and so wanting in *esprit de corps*, as to neglect this duty of placing their names upon the Dentists' Register.

The framers of the Dentists Act of 1878 carefully provided for the Registrar a *modus operandi* by which the negligent might be stirred up to a sense of their sins of omission, and, if the negligence were persisted in, duly punished. In Section 12 (3) of the Act it is enacted that "the General Registrar may send by post to a person registered in the Dentists' Register a notice inquiring whether or not he has ceased to practise, or has changed his residence; and if the General Registrar does not, within three months after sending the notice, receive any answer thereto from the said person, he may, within fourteen days after the expiration of the three months, send him by post in a registered letter another notice, referring to the first notice, and stating that no answer thereto has been received by the Registrar, and if the Registrar . . . does not within three months after sending the second notice receive any answer thereto from the said person, that person shall for the purpose of the present section be deemed to have ceased to practise, and his name shall be erased accordingly." Shortly after midsummer last letters of inquiry were sent to all persons whose names appeared on the register of 1887, and of these notices nearly 1,000 remained unanswered; accordingly, three months later, registered letters were sent to these defaulters to the

number of about 1,000, and the result of the whole transaction has been that the Registrar has been enabled to make a very extensive revision and correction of the register, and a glance at the following table will show that the number of dentists registered as "in practice before 1878," and the number of those registered by qualification have undergone a very considerable change during the few years that have elapsed since the passing of the Dentists Act. It will be noticed that what is happening is exactly what was foreseen by the framers of the Act, and what has been foretold again and again in these columns, namely, that the number of those who are registered on their declaration of having been in practice previous to a certain date would rapidly diminish, while the number of dental licentiates on the register would rapidly increase :—

Year.	(a) Licentiates.		(b) Registered as having been in practice prior to June, 1878.		Approximate percentage of (b) in regard to total.	
1879	...	483	...	4,806	...	91
1881	...	565	...	4,698	...	89
1883	...	759	...	4,472	...	85
1887	...	932	...	4,243	...	82
1888	...	977	...	3,889	...	79

The licentiates have thus more than doubled their numbers, while the unqualified practitioners have decreased nearly a fourth, and the balance between the two, in regard to the total, shows an improvement of 12 per cent.

So far the result is satisfactory, and the profession is to be congratulated upon possessing a trustworthy register on which they may rely. If any practitioners have gone off the register in consequence of their own negligence, let them lay the lesson to heart, and forthwith apply to the registrar for restoration ; they have nobody to thank for their misfortune but themselves, and it is a real misfortune to be omitted from the only authorised list of respectable practitioners.

The Registrar has hitherto appended to the register a list of dental students who have not as yet passed into the register of qualified practitioners ; this has been done merely for the convenience of those concerned ; it has, however, come to his knowledge that some of these students have abused the privilege thus accorded to them by his courtesy, and have, in consequence of their names appearing in this list, omitted to register in the proper manner when qualified. This short-sighted policy has brought about a well-merited punishment, for the registrar has reluctantly decided to omit this list altogether in future editions of the register.

Nothing remains to be said except that, having got a good register, it rests with ourselves to keep it good ; it will be the duty of everyone to afford the Registrar information, if possible, through the hon. secretaries of their respective branches, or through the hon. secretary of the Association, of any changes that may come within his cognizance, and we may in passing note that one of the most fruitful sources of error is the non-communication of deaths. While, however, we consider it is everybody's business to do all that in him lies to assist the proper authorities in such matters, we cannot forget that what is everybody's business is nobody's business, and we, therefore, sincerely hope that the registrars of deaths throughout the country will not omit to perform their very necessary duties in this particular.

At the closing meeting of the Edinburgh Students' Society, the President, Mr. W. Wilson, L.D.S., M.B., C.M., read a most interesting paper on "Dentists and Dentistry in Edinburgh during the past Hundred Years." At the close of the address, Mr. W. Wilson was requested to prepare the paper for publication.

The Australian Dentists Act, 1887.

NINE years ago the long uphill battle of dental reform may be said to have culminated in the passing of the Dentists Act of 1878 and the subsequent formation of the British Dental Association, whose principal business was to watch over and assist the working of that Act. A decade has not passed away before the example of the mother country has been followed in Australia, and in 1887, to quote an Australian contemporary, "Victoria has again assumed the lead in beneficial legislation, and now numbers a Dentists Act among her effective laws." "The three allied callings, Medicine, Dentistry, and Pharmacy," our contemporary continues, "are each surrounded by right and proper restrictions, which will protect the public from the depredations of unprincipled people, who otherwise would unhesitatingly assume to a knowledge of these arts and sciences, and fleece the class which is unable to protect itself and to distinguish between a qualified man and an impostor." We hope the new Act will do all that our contemporary prophesies, and we trust it will achieve those beneficial results with less expenditure of time and money than has attended the working of its elder brother over here, but our Australian brethren must not be disappointed if they find that the process of making people good by Act of Parliament has its delays, difficulties, and disappointments; if, however, the Australian Act works as well as ours has done, we do not think our antipodean friends will have much cause for disappointment.

We hope soon to be able to lay the new Act in its entirety before our readers; in the meantime we are able to give a slight sketch of some of its provisions.

It provides for the formation of a Dental Board consisting of five dentists and three doctors, who shall hold office for three years. Afterwards their places are to be filled by

a like number of persons of the same grades, but only by election from the general body of dentists, the initial board being selected by the Governor in Council. The Governor has power to remove any member of the board at his discretion, a regulation of which our contemporary (the *Australian Chemist's Review*) highly disapproves. It considers that there is too much of the element of supervision by political non-professional people in the Act, and that this can do no good and may be very hurtful.

The Act provides for the compilation of a Dentists' Register, and for the subsequent erasure of names which have been improperly added, and also of the names of dentists who have been convicted of misdemeanour or felony. This Register is to be published every January, and the appearance of a name upon it will be taken as *prima facie* evidence of qualification in any law court.

The following persons are entitled to registration :—(1) All medical men or persons in the actual practice of dentistry at the date of the passing of the Act. (2) All persons over twenty-one years of age, who have studied dentistry for four years and passed the examinations instituted by the board. (3) All persons who, for six months previous to the passing of the Act, have been dentists or apprentices to a dentist, and who shall continue in that capacity for a further term of three years. (4) Any person not domiciled in Victoria, on showing that he has practised for ten years and holds a foreign diploma.

"The clauses," our contemporary continues, "referring to dental practitioners outside Victoria are not at all clear, and seem to imply that registration will only be allowed after the applicant proves he holds a diploma granted in a country other than Great Britain, and has been in practice for ten years." This will fall heavily on New South Welshmen, and strictly guards Victoria from incursions from the

sister provinces, while at the same time it drifts all the undesirable practitioners into New South Wales to repose under the protection of a legislative assembly that is still very jealous of the rights of "the uninformed." It would, of course, be absurd to criticise a Bill the provisions of which we only know in abstract, but this apparently invidious ostracism of the British diploma is very difficult to understand; no doubt a perusal of the complete Act will clear the matter up.

The examinations will be based on regulations formed by the board, and the fees for the examinations will be controlled in some manner by the Governor in Council. The exact nature of this control we are unable to gather from our contemporary; we will, therefore, once more quote in the hope that some of our readers may be more successful than we can profess to be in translating the Australian editorial style: "With regard to the fees, the old humbug of a Governor in Council again pops his nose out, and as he snorts so shall the fees be!"

We hope to be able presently to lay before our readers some more definite details of this Act; in the meantime we are sure that all who sympathise with the aims and objects of the British Dental Association will wish God speed to the new Act, and desire for our friends across the water a full measure of success in carrying out its enactments.

THE Students attending the Edinburgh Dental School held their fourth annual dinner in the Albert Hotel, on the evening of Friday, March 23rd. Mr. G. W. Watson, L.D.S., occupied the chair, and Mr. D. Monroe, L.D.S., acted as croupier. Most of the staff were present, and a most enjoyable evening was spent by students and friends.

ASSOCIATION INTELLIGENCE.

Central Counties Branch.

A MEETING of the Central Counties Branch was held at 71, Newhall Street, Birmingham, on Thursday, March 8th, Mr. W. E. HARDING, President, in the chair.

It was resolved to postpone the date of the Annual Meeting, from August to Friday, October 5th.

Mr. C. SIMS opened a discussion upon ancient mechanical dentistry, which he illustrated by a large and varied number of specimens of mechanical work, including bone work, ivory base with natural teeth, old tubes, and early porcelain flats. The subject was one of great interest, exhibiting the various stages of progress in the mechanical art of the dentist during the century. Mr. Sims also exhibited a specimen of cystic tumour of the lower jaw, which included the angle and condyle of the left side.

A special meeting of the Central Counties Branch will be held during the month of May, when Dr. Campbell of Dundee, will exhibit Hastie's Water Motor with improvements; Mr. H. N. Grove of Walsall, New Electric Motor with accumulators, and several other novelties of interest to the profession.

The date of the meeting has not yet been fixed, but due notice will be given, and it will be open to all respectable practitioners.

JOHN HUMPHREYS, *Hon. Sec.*

West of Scotland Branch.

THE final sessional meeting of the West of Scotland Branch was held in the Hall of the Faculty of Physicians and Surgeons, Glasgow, on Thursday, March 22nd, at eight p.m. W. S. WOODBURN, L.D.S., Glasgow, in the absence of the President, in the chair.

After the usual formal business, a case of congenital cleft of the palate, was brought before the meeting by Mr. John A. Biggs, Glasgow, who read a paper the same in substance as that previously delivered before the Odonto-Chirurgical Society in Edinburgh. The velum shewn at Edinburgh, however, was constructed of hard rubber while the one shewn here was of soft.

Mr. BIGGS, after reading the paper, passed to the chairman the model, which was cast in two parts and shewed very distinctly the inferior and superior surfaces of the palate, the pharyngeal wall, the bifurcated uvula and the palato-glossus muscle, the turbinated bones and the vomer. He then passed round the plate which was of gold, and was mounted with six teeth and two blocks of white rubber. The velum of soft rubber was vulcanised to a hinge which was secured to the plate by screws and nuts, also of gold.

The patient was introduced, and the chairman and gentlemen invited to examine the cleft, their attention being particularly drawn to the left upper first bicuspid, which had been built up by first forcing a ferule up over it and then filling with amalgam, and in the left central incisor root a gold tube was secured to prevent waste by the action of the pivot.

In the discussion which followed, Mr. Brownlie remarked on the great results in cases of congenital cleft which followed from a careful and constant education of the patient in the production of distinct articulate sounds. It was a matter which was generally neglected by those having charge of such cases. He recalled an instance of a lady, whose clearness of articulation astonished him, and which had been brought about by the constant attention of her father when she was young. Mr. Brownlie fitted in a case in the usual way, but the pronunciation was in no sense improved thereby, and it was ultimately discarded.

Other gentlemen also took part in the discussion.

Mr. AMOORE exhibited, microscopically, two sections taken through the teeth and jaws of an angler fish (*lophius piscatorius*), one in which the tooth was ankylosed to the jaw, and the other through one of the hinged teeth so well marked in this fish. It showed on the one side the ligamentous band connecting the posterior part of the tooth to the jaw, and externally the buttress or pedestal of bone upon which, as in the section, the front part of the tooth rested when erect. A third preparation was a longitudinal section of the incisor of a rat, and illustrated the marked varicosities in the enamel fibres peculiar to that class of rodents.

Mr. Amore remarked on a case of pyorrhœa alveolaris that had come under his notice in the mouth of a small pet dog, a Yorkshire terrier, nearly four years old. The teeth, the incisors especially, were coated thickly round the necks with tartar; the little animal was too restive to allow him to examine the nature

of it closely, but in appearance it resembled the greenish coloured variety. The gums were congested and the margins red and inflamed, three of the lower incisors had already been lost, another was almost out, and all were very loose. Its mistress informed him that she had observed a similar condition in some of its predecessors, and that they attributed it to the hot, and also sweet food with which they were fed.

Dr. OSWALD FERGUS then asked the attention of the gentlemen present while he brought before them a case of auto-extraction and replantation, performed on the 27th of February, the tooth being now firmly in position and performing its share of masticatory work. On the morning in question he had to go by an early train to the coast, and as he had passed a sleepless night, from severe odontalgia, he took the precaution of arming himself with a hypodermic syringe, a few minims of a ten per cent. solution of cocaine, and the necessary forceps. The morning journey seemed to aggravate the symptoms, so much so, indeed, that on arrival at his destination he injected eight minims of the solution of cocaine, and after waiting twelve minutes extracted the offending tooth without experiencing the slightest pain. The tooth (an upper bicuspid) was merely washed in a little tepid water and restored to its place, the lower jaw being firmly occluded to ensure more perfect adaptation.

The sensations and physical condition while under the influence of the cocaine were described as follows:—"Throughout, there was a sense of stimulation, which when at its height might be classed as *between* stimulation and intoxication. The senses were perfectly acute, with the exception of vision, which was impaired in accommodation alike for both near and distant objects. Thus the characters of a newspaper seemed unduly spaced and confused, though intelligible (the word commandment appearing c-om-ma-ndme-nt), and the outline of the distant landscape decidedly blurred. The pulse at time of extraction was 117, which must be considered a high rate, the normal course being 65 or 70 per minute. One hour after the operation it was found to have fallen to 112. At no time was respiration in any degree impaired, but throughout it was slightly quickened.

"There were, moreover, slight tremors best illustrated in an unsteadiness of the hands, with marked twitchings of the facial muscles. A little stimulant, taken after the replantation, seemed to mitigate the most apparent symptoms, and fifteen minutes

after extraction a letter was written, which has since been asserted as being both sensibly expressed, and with the caligraphy such as is usual, showing that the mind was clear and the muscular tremors abated."

The following is a short note of the state of the tooth and parts on the 19th March. "The replanted tooth is now practically restored to usefulness; it seems to be protruded more from its socket than formerly, and there is still a suspicion of looseness, though not enough to prevent its being freely used in the mastication of such articles of diet as biscuits, or even toasted bread. The healing process, especially during the first week, was decidedly irksome, but by no means unendurable, the chief difficulty being in confining mastication to the unaffected side."

Messrs. Biggs, Amooore, and Oswald Fergus were voted the thanks of the society, and a similar compliment to the chairman brought the meeting to a close.

Irish Branch.

A MEETING of the Irish Branch will be held in the Royal Hotel, Donegal Place, Belfast, on Friday evening, April 20th, at eight o'clock.

PAPERS:—"The Dentists' Register in Ireland in 1888," illustrated with maps, W. Booth-Pearsall, hon. sec. "Experiences with Nitrous Oxide Gas, and its Prolonged Administration," T. C. Clarke. "The Treatment of the Six Year Molars," W. J. Bowden. "Notes about Tooth Structure," J. J. Andrew.

FOR EXHIBITION:—"Faure Accumulators for the Electric Mallet and Motor for Dental Engine," J. C. Clarke. "Regulation by Means of the Expansion Plate at twenty-one years," J. C. Clarke. "Lantern Slides of Photographs of Tooth Structure, and Microscopical Sections," J. J. Andrew.

Dinner will take place at the Royal Hotel at 6.30 p.m., before the meeting. Members intending to be present at the meeting or dinner, are requested to notify their intention to W. H. Elwood, 62, Dublin Road, Belfast, or John McStay, 37, King Street, Belfast, members of Branch Council in Belfast.

The President elect of the British Dental Association is expected to take the chair.

W. BOOTH-PEARSALL, *Hon. Sec.*

Midland Branch.

THE Annual Meeting of this Branch will be held on Friday, May 18th, at the Institute of Science and Art, Clifford Street, York, under the presidency of T. E. KING, Esq., L.D.S.

On Thursday evening preceding the meeting, Walter Glaisby, Esq., L.D.S., will hold a reception at his house, 4, St. Leonards, from 9 to 11. Papers are promised by F. H. Weekes, Esq., F.R.C.S., on "Anæsthetics," by T. M. Nicol, Esq., L.D.S., on "Dental Education," and by F. Harrison, Esq., M.R.C.S., on "Cases in Practice." H. Blandy, Esq., L.D.S., will introduce for discussion the question, "On what basis shall dental services be rendered in public elementary schools?" Demonstrations will also be given by Dr. St. George Elliott, M. Johnson, Esq., L.D.S., G. G. Champion, Esq., L.D.S., and G. Brunton, Esq. T. E. King, Esq., President-elect, very kindly invites the members to lunch with him.

The Dean of York has very kindly promised to conduct members and friends over the Minster on Saturday morning, and other interesting features of the city and neighbourhood will be accessible.

The Annual Dinner will be held at the Station Hotel, on Friday evening; tickets (without wine) 7s. 6d. each.

W. H. WAITE, *Hon. Sec.*

Oxford Street, Liverpool.

Western Counties Branch.

APPEAL.

WE have received the following appeal from Mr. Browne-Mason, of Exeter, to which we gladly give prominence:—

Newton Abbot, *March*, 1888.

We venture to send you the following statement. Mr. John Marks surgeon dentist, of Newton Abbot, a young man just beginning to be able to save some money to make provision for his wife and family, died on Thursday, March 15th, of pneumonia, after a week's illness; he leaves a wife and four children, the eldest a boy eleven years old, the youngest also a boy three years old; the two other children are girls, respectively ten and eight. The relations on both sides can give but very little help, and the widow has from insurance and the interest of other moneys, under £30 per year. Mr. Marks has been well known, and respected, and worked hard and lived very quietly, and we hope that some who read this may be able and willing to help in this painful case, and subscriptions sent to any of us will be care-

fully expended, and will be most necessary for the fitting education of the children.

Signed,

LEWIS BEARNE.	J. W. LEY.
L. E. BEARNE.	W. A. RIACH.
H. S. GAYE.	H. TUDOR.
J. T. HILL.	W. VICARY.
T. L. JAMIESON.	G. T. WARNER.
W. KITSON.	F. WATTS.

Subscriptions may be paid into Messrs. Watts & Whidborne's Bank.

SUBSCRIPTIONS.

	£	s.	d.
Rev Prebendary Tudor ...	5	0	0
J. W. Ley, F.R.C.S. ...	10	0	0
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F. Watts ...	5	0	0
Dr. Gaye ...	10	0	0
General Hill ...	10	0	0
Rev. G. T. Warner ...	15	0	0
T. L. Jamieson ...	5	0	0
General Riach ...	5	0	0
Mrs. Ness ...	10	0	0
D. R. Scratton ...	5	0	0
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John T. Browne-Mason ...	3	3	0
Henry B. Mason ...	1	1	0
W. J. Goodman ...	1	1	0
E. E. Brand ...	3	3	0
J. H. Hedgeland ...	1	1	0
J. C. Tippet ...	2	0	0
F. H. Balkwill ...	1	0	0
T. Cooke Parsons ...	2	2	0
A. Kendrick ...	0	10	6
M. Magor ...	1	1	0
J. H. Gartrell ...	0	10	0
J. Smith-Turner ...	1	1	0
W. A. Hunt ...	1	1	0
C. Williams ...	1	1	0
A. Curle ...	1	1	0

H. Helyar ...	...	...	...	...	£1	1	0
Sir Edwin Saunders	...	...	...	...	5	5	0
J. H. Martin	...	...	...	...	2	2	0
T. T. Genge	...	...	...	...	0	10	6
A. J. Woodhouse	...	...	...	...	5	5	0
E. F. Dudley	...	...	...	...	1	1	0
J. R. Brownlie	...	...	...	...	3	3	0
F. Youngman	...	...	...	...	1	1	0
A. Helyar	...	...	...	...	1	1	0
G. B. Pearman	...	...	...	...	1	1	0
R. P. Morrison	...	...	...	...	0	10	0
C. Gaine	...	...	...	...	1	1	0
H. Champion	...	...	...	...	3	3	0
Morton Smale	...	...	...	...	1	1	0

ORIGINAL COMMUNICATIONS.

A Case of Laryngeal Spasm under Nitrous Oxide, in a Patient with old-standing Arthritis of the Lower Jaw, Cervical Vertebrae, and other parts; Laryngotomy; Remarks.

By FREDERIC HEWITT, M.A., M.D., Cantab.

INSTRUCTOR IN, AND LECTURER ON, ANÆSTHETICS, AT THE LONDON HOSPITAL; ADMINISTRATOR OF ANÆSTHETICS AT CHARING CROSS HOSPITAL, AND THE DENTAL HOSPITAL OF LONDON.

THE following case came under my observation at the close of last year. I have thought fit to publish it for two reasons. In the first place, I am convinced that there is no better mode of extending our knowledge respecting the action of anæsthetics, than by carefully observing and recording all peculiar and instructive cases; and, in the second place, I venture to hope that, by making known the following details, fresh light may, in the course of time, be thrown upon those features of the case which are at present involved in some obscurity.

On Dec. 1st, 1887, at five p.m., I was called to administer nitrous oxide for a well known dental surgeon in my neighbourhood. The patient was a gentleman, thirty-five years of age, who, at first sight, presented no obvious peculiarities in his appearance. He was of middle stature, well nourished, and of rather florid complexion. Subsequently, on careful examination, it was discovered that, with the exception of very slight rotatory and nutatory movements, the head was so rigidly fixed, that when the patient wished to look to the right or left, he invariably moved his body in the required

direction. Most of the muscles of the neck and throat, especially those situated posteriorly, were found to be abnormally rigid, whilst in addition to the stiffness of movement which existed in the cervical region, the jaws could only be separated to about one fourth of their normal extent.

Since the date above referred to, the patient has very kindly furnished me with full particulars of his previous health, and the following is a brief abstract of his statements. He had rheumatic fever, followed by several subacute rheumatic attacks, in 1871. Was weak and ill during 1872. Was dangerously ill with "some kind of enteric fever," in Italy, in 1873. He grew stronger in 1874, and continued to improve. In 1882 he had typhoid fever in England. In 1883 he was very ill and weak "with low fever coming on every now and then." After this he grew gradually stronger, and with the exception of stiffness in most joints, not only of the extremities, but also of the trunk, he regained good general health. The stiffness in the neck muscles and inability to open the mouth beyond a certain degree, were first observed in or about the year 1874. Even when he is in his usual health he can produce audible crackling in many of his joints, especially in those of the lower jaw, cervical vertebræ and wrists.

The administration of nitrous oxide on the occasion referred to, was conducted in the usual manner. The operator, who was about to remove the left first upper molar tooth, placed a small gag between the teeth on the right side. I applied the face-piece, and first allowed the patient to breathe air through the apparatus. Nitrous oxide was then admitted, and each expiration was allowed to escape.* The phenomena which usually attend the inhalation now presented themselves, and the face-piece was removed when the characteristic alteration in the respiratory rhythm commenced to appear. The tooth was then without difficulty extracted, and was found to be intact. The admission of air when the face-piece was removed, did not, as is usually the case, restore the respiratory rhythm. I may here mention that it is my practice to remove the face-piece and to terminate the administration when the rhythm of breathing *commences* to become impaired. The admission of air

* Although I have previously pointed out in these pages, that there are some advantages in allowing a patient to re-breathe nitrous oxide for a few respirations, just towards the close of the administration, I now rarely adopt this plan in consequence of the difficulty of thoroughly cleansing the bag after each case.

during the peculiar intermittent respiration at the end of an administration is usually sufficient to restore the normal breathing in a few seconds. But on this occasion, the respiration, after the removal of the face-piece, became more and more difficult, and finally ceased, as though from some *obstructive* condition of the air passages. The reason why I emphasise the word obstructive, will be subsequently seen. The sound made by the last attempts at respiration was, to a certain extent, suggestive of fluid at the back of the throat. My first act, therefore, was to attempt to turn the head upon its side, and to push forward the lower jaw, a procedure which in ordinary cases is almost invariably successful in re-establishing breathing, when a little blood or mucus has accumulated at the back of the pharynx. The patient, however, was in a state of extreme tonic spasm, which more particularly involved the previously rigid muscles of the throat and neck. From this cause, and from the rigidity of the cervical spine, it was impossible to rotate the head except to a slight extent. Moreover, seeing that there was a considerable degree of fixation of the lower jaw, it was found impossible to push the latter bone forwards. I next attempted to pass my fingers to the back of the mouth, but I was unable to do so, as the aperture between the front teeth was so small, I therefore applied the tongue forceps, and made vigorous traction, but without any good effect. As a small quantity of blood from the socket of the extracted tooth had now escaped into the mouth, and as the rigidity of the patient prevented my bending his head forwards, I decided to attempt to invert him and at the same time to forcibly compress the thoracic walls. With the able assistance of my colleague this was done; but the manœuvre proved unsuccessful. The thoracic walls were absolutely immovable. I next placed the patient on the floor, and very forcibly pressed upon the sternum whilst I applied the tongue forceps as before. Respiration had now ceased (according to my estimate) for two to two-and-a-half minutes. It will be observed that I never attempted artificial respiration (in the usual acceptation of the term), for I was sure that the unyielding rigidity of the thoracic walls, which rendered futile all our endeavours to compress them, would have rendered any more formal efforts equally nugatory. The face was livid and bloated, the lips purple, the whole body rigid, the chest motionless and fixed. There was no time, nor was it necessary, to feel the pulse. I was perfectly confident that the failure of respiration was such that, if I could successfully perform laryngotomy, recovery

would almost certainly follow. I therefore asked my colleague to get the tracheotomy instruments, which I always carry, from my bag. In order to save time—for death was imminent, and every moment precious—I employed his pocket-knife, so that whilst I was performing the operation, he might be preparing the tube. I made a skin incision, and then rapidly passed the small blade of the pocket-knife into the crico-thyroid membrane. In my eagerness to gain admission to the trachea I cut either partly or wholly through the cricoid cartilage. The parts were much obscured by dark venous blood. Passing the tip of my little finger into the opening thus made, the rushing sound of entering air immediately became audible, and the tube was without difficulty introduced. I next sent for Mr. Sheild, who subsequently took charge of the case. When consciousness had returned, the patient expressed a wish to see Sir James Paget, under whose care he had formerly been; and it was not long before this wish was gratified, for Sir James was kind enough to come without delay. All super-added spasm had now completely subsided, and the patient was able to speak without difficulty. Bearing in mind the unexpected and pronounced nature of the spasmodic seizure, it was decided after a brief consultation, to allow the tube to remain in position till next day, when it was removed by Mr. Sheild. My colleague, whose able assistance and uniform kindness I shall ever appreciate, allowed a bed to be arranged in the room in which the operation had been performed, and an equable temperature was carefully maintained throughout the night. The wound completely healed in a week's time, and the patient made an excellent and uninterrupted recovery.

In carefully considering the facts of the above case, three questions present themselves:—1. What was the nature and exact situation of the obstruction to respiration? 2. What was the cause of the spasmodic condition? 3. Could any other means short of laryngotomy, have been successfully adopted for the relief of the symptoms?

1. *The nature and situation of the obstruction.*—When the administration of nitrous oxide is pushed to its full extent, air being rigidly excluded, a peculiar alteration in the rhythm and amplitude of the respiratory movements almost invariably ensues. I have elsewhere* pointed out that the intermittent and somewhat tu-

* Trans. Odont. Soc., Vol. xix., No. 5, New Series, p. 125.

multuous respiration produced by a full dose of nitrous oxide is partly, if not wholly, dependent upon the spasmodic action of certain extrinsic muscles of the larynx. Towards the close of an administration of the gas, it will be found that the larynx becomes, at irregular and short intervals, drawn up, as in the act of deglutition. Every time the larynx is thus raised, its superior aperture becomes closed, partly by the epiglottis, and partly also by the action of the sphincter muscles. The alteration in respiratory rhythm is thus rendered intelligible; for, at the moment at which the larynx is raised, and its superior aperture closed, respiration becomes temporarily checked and its rhythm therefore altered. Even though nitrous oxide be pushed to an undesirable degree, the removal of the face-piece and the admission of air will, with the rarest exceptions, suffice to restore breathing. I have introduced these remarks, because they may possibly tend to throw some light upon the question now under discussion. I am not prepared to state that in the above case, the obstruction was wholly occasioned in the manner just described. The occlusion may have exclusively arisen from spasm of the sphincter muscles, and the spasmodic elevation of the larynx may have played an unimportant part in the causation of the obstruction. But, whatever was the determining cause of the obstruction, two facts became apparent; firstly, that the occlusion of the air passages was of a spasmodic nature, the spasm having involved either the sphincter muscles of the larynx, or the elevators of the larynx, or both; and secondly, that the supra-glottic portion of the larynx was the seat of the obstruction to respiration. There is every reason to believe that the vocal cords themselves took no active part in causing the obstruction; for there was no stridor such as that which is met with in laryngismus stridulus, or spasm of the true cords.

Taking all circumstances into consideration, it is not unreasonable to suppose that the primary difficulty in respiration was identical with that which usually manifests itself in a minor degree at the conclusion of an administration of nitrous oxide—a difficulty dependent upon the intermittent elevation of the larynx. Going one step further, we naturally inquire: Why did this intermittent obstruction terminate in complete occlusion of the air passages? Either the larynx must have been prevented from descending by reason of some abnormal condition in its extrinsic muscles; or the sphincter muscles of the larynx must have

become affected with the most obstinate form of spasm. Whether one or both of these conditions existed it is, so far as I know, impossible to say. Moreover, we must not lose sight of the possibility of two minor conditions having contributed to the obstruction. A certain amount of venous engorgement occurs under nitrous oxide, a fact which, in a full-blooded patient might account for a limited degree of narrowing of the superior aperture of the larynx; and, if we admit that the elevation of the larynx and the application of its superior aperture to the epiglottis was an important element in the case, it is obvious that any attempts on the part of the thoracic and abdominal muscles to overcome the obstruction would have had a deleterious effect, in consequence of the suction action upon the epiglottis which would thereby have resulted.

2. *The cause of the spasmodic condition above described.*—It is unfortunately, impossible, in the present state of our knowledge concerning nitrous oxide, to say what causes operate in the production of the tonic and clonic phenomena with which all who have administered the gas must be acquainted. It is not my intention to discuss, on the present occasion, the physiological significance of these phenomena. Whatever may be the cause of the spasmodic movement which, at the termination of an administration of nitrous oxide, are prone to affect many of the muscles which are directly or indirectly concerned in the maintenance of respiration, I cannot avoid the belief that, in the above case, other and perhaps more important factors must have been at work. There would seem to be reasonable grounds for the hypothesis that a patient whose throat and neck muscles had undergone certain changes by reason of the restricted movements in the articulations of the jaws and vertebræ might be peculiarly affected by the ordinary dose of nitrous oxide. A certain degree of hypertrophy was probably present in some muscles, whilst in others the opposite nutritive condition doubtless existed. It is a noteworthy fact that the spasm which produced the stoppage of respiration, was of a most pronounced character. Granted that the initial or predisposing cause of the seizure was the presence of nitrous oxide in the circulation, I cannot but think that some other more potent cause subsequently came into operation. In the absence of more tangible reasons, I am therefore inclined to regard the intense spasm which rapidly supervened as connected in some way or another with the ab-

normal arrangement or condition of the muscles of the throat and neck already referred to.

3. *The treatment adopted.*—The usual methods of restoring respiration were, as I have described, fully tried. One of the most remarkable features of the case was the extreme rigidity of all the muscles of the neck and chest, so that all attempts to push the lower jaw forwards or to compress the thorax were unsuccessful. It may not be out of place, in this connection, to point out the great difference between failure of respiration from some obstruction in the air passages and failure from paralytic causes. In the latter condition, when uncomplicated, artificial respiration will, in a few moments, restore respiration, because air may be readily forced into and out of the chest. In the former condition it is obviously useless to attempt to systematically perform artificial respiration, but the attention should be directed towards the removal of the obstruction. Traction upon the tongue which is usually successful in restoring breathing which has ceased in consequence of obstruction at the superior aperture, was vigorously tried, but without good effect. Had it been practicable to have opened the mouth widely, it is possible that the obstruction might have been overcome by hooking forward the epiglottis and separating the approximated sides of the superior aperture of the larynx with the finger; but such a procedure was unfortunately out of the question by reason of the partial ankylosis of the lower jaw. Artificial respiration, in the usual sense of the term, was, for obvious reasons, useless; and forcible compression of the chest completely failed to drive anything past the obstruction. Laryngotomy was, therefore, the only remedy left, and, as I have already described, this measure was completely successful.

It is extremely rare for any emergency to arise under nitrous oxide, and a prolonged acquaintance with the anæsthetic has proved that, in experienced hands, the danger to life incurred by its administration is so infinitesimal that it may be disregarded. Still, as the above case has shown, we must be ever on the alert and ready to cope with any difficulties that may arise. Had the patient not been the subject of the peculiar condition of the neck and throat above described, it is in the highest degree probable that no serious effects would have been produced by nitrous oxide. Were I to be asked, on some future occasion, to anæsthetise a similar patient, I should either prefer to induce very slight anæ-

thesia with nitrous oxide, and then proceed to administer ether vapour till the required degree of narcosis had become established, or I should administer ether alone. So far as I can ascertain, no similar case has hitherto occurred ; and I therefore trust that the above details may help to add to our knowledge respecting an anæsthetic whose advantages are so universally appreciated.

REPORTS OF SOCIETIES AND OTHER MEETINGS.

The Odontological Society of Great Britain.

THE Ordinary Meeting of the above Society was held in its rooms, 40, Leicester Square, April 9th, Mr. J. HOWARD MUMMERY, M.R.C.S., L.D.S., vice-president, in the chair. There was a full attendance of members and several visitors were present.

The minutes having been read and confirmed—

The CHAIRMAN read a letter from the president, in which Mr. Corbett regretted his inability to be present at the meeting.

Messrs. Alfred Stevens and James Rymer having signed the Obligation Book, were admitted members of the Society.

The LIBRARIAN announced additions to the library, and

The CURATOR described some interesting specimens which had been added to the Society's collection, including three geminated teeth, a five-fanged molar presented by a gentleman who was not a member. Another specimen was very curious. A gentleman while in Ceylon found his teeth loosened one after another ; he fixed them by gold wire, so that at last the whole set were kept in the mouth by being bound to one remaining molar. The teeth moved up and down, and presented a most grotesque appearance.

Referring to the above specimen, Mr. FELIX WEISS said a similar curiosity already existed in the Society's Museum, reputed to have belonged to Cleopatra. If the inventive faculty of the gentleman in Ceylon had suggested the wiring together of the loosened teeth, Mr. Weiss did not see why Cleopatra might not have had similar ingenuity brought into play to supply her dental requirements.

Mr. HUTCHINSON believed the specimen to which Mr. Weiss referred was supposed to have belonged to the Queen of Oude, and not to Cleopatra.

Mr. SMITH TURNER asked whether the specimen Mr. Bennett showed would not fall into the category of bridge work ?

Mr. BOYD WALLIS presented specimens for Mr. Lord, of Blackburn, consisting of a very excellent example of geminated permanent teeth in the upper jaw, and of gemination in temporary teeth. Mr. Gilbert Walker showed a specimen of vulcanite gum work, made of a mixture of pink and white vulcanite, which he suggested gave a more satisfactory and natural colour than the gum work obtained by the ordinary methods. Mr. Redman, of Brighton, showed for Mr. Gibbons an ingeniously devised instrument for the removal of fangs badly hollowed out by caries, and liable to crush under root forceps. Dr. Mitchell showed some forms of rubber-dam retractors, also a set of chisels and gouges similar to those employed by Dr. Jack, of Philadelphia. These instruments he found of especial value in breaking down enamel.

Dr. STRETCH DOWSE then read a paper on "Some Practical Points in the Physiology and Pathology of the Fifth Pair of Nerves." He commenced by describing the origin and distribution of the nerves in question. Having referred to various central aberrations due to reflex irritation through the fifth pair, the question of heredity was dealt with, and it was stated that this pair of nerves, like other parts of the nervous system, is liable to be affected with disease transmitted from parents to children. Most affections of the fifth nerve are found associated with a generally unstable sensory side of the nervous system. Tic-douloureux may be peripheral, and due to decayed teeth or pressure, as from inflammatory effusion, clot or tumour. The most superficial nerves are principally affected, and the skin over the points of their emergence from the bone the chief seat of pain, due, it is believed, to the fact that the nerves possess recurrent fibres which are more numerous towards the periphery. An interesting case of Dr. Ferrier's (a full report of which occurred in this Journal, February number), of paralysis of the fifth nerve, was quoted, to which Dr. Dowse added an account of a case under his own care. Reference was next made to some conditions of the fifth nerve due to its sympathy with the irritability of distant organs. Derangements of the stomach give rise to neuralgic headache. Hyperexcitation of the terminal fibres of the vagi probably affect the sensory roots of the fifth pair through the medulla and so cause derangement of the sensory and trophic branches, hence ensues headache, &c. Facial neuralgia is often preceded by gastralgia, or pleurodynia. Supra-orbital neuralgia, as associated with megrim, is due, Dr. Dowse believes, to a low form of vitality,

defective digestion and assimilation, and deficient hæmoglobin. Some neuralgias of the fifth pair in women are associated with uterine and ovarian irritation, and appear to be largely influenced by the menstrual crises. Trophic influences possessed by the fifth nerve are shown by herpetic outbreaks upon the lips, tongue, cheek or buccal mucous membrane, as well as the varieties of stomatitis, erythematous, follicular, ulcerative and phagedænic. Dysæsthesia of the teeth, that is, a want of normal sensibility, occurs in initial locomotor ataxy and general paralysis of the insane, and this, as well as a creeping sensation felt over the facial skin supplied by the fifth nerve, is attributed by Dr. Stretch Dowse to trophic changes due to fifth nerve dyscrasia. Referring to locomotor ataxy, Dr. Stretch Dowse took occasion to comment upon the inadequacy of our present knowledge of that disease. The involvement of the fifth nerve in that malady has not, he thinks, been sufficiently appreciated. It does not appear to have struck neurologists, he avers, that inveterate neuralgias of the fifth nerve are in part due to sclerosis of the ascending fibres which run into the trigeminus from the posterior horn of the cervical spinal cord. Having described the leading symptoms of locomotor ataxia, Dr. Dowse proceeded to consider, first, pupillary changes. He considered that inequality of the pupils, coupled with want of re-action to accommodation, to be pathognomonic. Contracted pupils are usually present. Second, ataxic movements, inability to equilibrate in the dark, or with closed eyes. Third, lightning pains. These Dr. Dowse regards as precisely analogous to the pains existing in the face from the affection of the fifth pair called tic. He queried whether or no, inveterate neuralgia of the face might not be due to sclerosis of the cervical branch of the fifth nerve to its nuclei of origin in the medulla or to its connection with the sensory trigeminal nucleus which lies at the level of the pons or to its ganglia. Dr. Dowse would himself regard the conditions as identical in character and causation. Fourth, severe arthropathies. Charcot's joint disease is characterised by painless destruction of the joint surfaces, accompanied with great effusion. Is this condition, the lecturer inquires, analogous to any state of the alveolar processes, tooth fangs and dental pulp? Fifth, absence of tendon reflexes. In locomotor ataxia the knee-jerk is absent. Considering the liability to confound a peripheral with a centric neuralgia, Dr. Dowse urged that patients should be carefully examined for nervous disease before tooth extraction was enjoined.

With regard to *treatment*, Dr. Dowse deprecated nerve-stretching, regarding it as unreliable, and admitted himself sceptical about the good results claimed by Professor Horsley as following avulsion as a cure for inveterate neuralgia. Drug treatment Dr. Dowse regards as useful, but not wholly satisfactory. He would place opium at the head of the list, simple peripheral tic yielding to hourly grain doses together with a liberal diet, and the local application of a 20 per cent. solution of cocaine. Facial neuralgia affecting the supra-orbital nerves are benefited by quinine twenty to thirty grain doses; while when affecting the "middle and inferior maxillary nerves," bromide and iodide of potassium with gelsemium answer best. Monsieur Goubler was quoted in advocacy of aconitine in the treatment of tic douloureux. Dr. Dowse employs Hottot's solution from $\frac{1}{16}$ grain upwards. Dr. Marinier's treatment of neuralgia, by injections of ergotine, has in the hands of Dr. Dowse proved useful. The application of galvanism and massage is also efficacious in all forms of neuralgia of the fifth nerve. Dr. Dowse employs a combination of voltaic and faradic currents, the former being in excess; weak currents he finds far the most serviceable. The method of application of electricity was then detailed, and Dr. Dowse concluded his paper by the statement that the last mentioned method of treatment had not received a sufficient or fair trial, and was capable, he believed, of more extensive development.

The CHAIRMAN having opened the discussion,

Mr. STORER BENNETT said it was interesting to note that Dr. Dowse had suggested different modes of treatment as applicable to the first, and second and third branches of the fifth nerve respectively. He asked what reason there was for the divergence in treatment.

Dr. MITCHELL narrated the history of a young man afflicted with intermittent neuralgia of the fifth nerve of a severe character. Medical treatment failing to relieve him, Dr. Mitchell examined his teeth for caries, but found none. There was evidence, however, that a lower wisdom tooth was unerupted. This was brought down upon and removed, and the patient's neuralgia disappeared. In another case ataxic symptoms, such as lightning-like pains, were stated to have arisen from a diseased condition of the patient's teeth. Upon remedying this the patient gradually recovered.

Mr. GADDES remarked that Dr. Dowse's paper was of great value, inasmuch as it pointed out the probable association of so

forms of neuralgia with sclerosis of the fifth nerve, or its central connection. It would assist dental surgeons to discriminate between peripheral and centric neuralgias, so enabling them to fulfil more effectually their functions.

Mr. NEWLAND PEDLEY mentioned a case under the care of the late Dr. Moxon which exemplified the dangers of extraction. The patient was afflicted with neuralgia, due, he thought, to dental irritation. Mr. Pedley in a weak moment was induced to extract a tooth, and found to his chagrin that the tooth was but little diseased and the patient in no wise benefited. Refusing subsequent overtures from the patient for further extraction, Mr. Pedley ascertained that, taking the law into his own hands, the patient had removed his own teeth, employing a pair of scissors to do so. Eventually it was discovered that the boy in question was suffering from cerebral abscess, and hence his neuralgia was centric. Nerve stretching in Mr. Pedley's experience was efficacious.

Mr. HERN narrated the first part of the history of Dr. Ferrier's case, to which Dr. Dowse had referred. The patient had applied for relief at Middlesex Hospital, and Mr. Hern, finding one of the teeth worn down, removed it, thinking there might be calcification of the pulp. No benefit followed the operation, and upon a subsequent occasion it was observed that the patient's pupils were unequal, and this ultimately led to his being referred to Dr. Ferrier.

Mr. J. SMITH TURNER had met with several cases of well-marked locomotor ataxia without, however, any of them revealing any matter of especial interest from a dental point of view. One case he recalled, which appeared to have interest in the present connection. A patient was brought from the country suffering from nervous disturbances arising from a lower wisdom tooth. He appeared what the speaker was inclined to call hysterical, and had to be supported to the operating chair by his father and his brother. At that time Mr. Smith Turner was inclined to regard the symptoms narrated as emotional, and evincing a want of control rather than as being the evidence of disease. The extraction of the tooth was followed by complete restoration to health. Viewing the case through the light of Dr. Dowse's facts, he was inclined to think that the judgment he formed at the time was erroneous.

Mr. PATERSON mentioned a case in which clonic spasm of the

lower jaw followed peripheral irritation. The patient, a railway guard, had been in the habit of elevating out his teeth with a little spatula he carried ; in this way he removed most of his teeth, and so altered the bite as to make the lower front teeth which remained bite into the ligament of the upper lip. A large ulcer formed upon the upper lip, and the constant irritation of this, by the surrounding adjacent teeth, had set up the spasm. With the utmost difficulty and only when chloroform had been used, was a model obtained. When the bite was duly adjusted, and the pressure taken off the ulcer, the spasm became greatly relieved. This patient had been given gelseminum, but had received little benefit from it ; in this case bromide of potassium had proved more efficacious.

Dr. STRETCH DOWSE, in replying, thanked the members of the society, and remarked that when quinine proved useful in neuralgia in the first division of the fifth nerve, its power was probably due to its well known 'anti-periodic' properties. The *rationale* of the treatment with gelseminum was a long story, which might be summarised by stating that the drug had a specific action upon the second and third branches of the fifth nerve.

The CHAIRMAN stated that the next meeting would be held upon May 7th, when Dr. Cunningham will read a paper upon 'Statistical Inquiry as to the Results of the Immediate Treatment of Pulpless and Abscessed Teeth.' Dr. Blake will also read a paper on "Dental Reflexes and Trophic Changes."

The Annual Odonto-Chirurgical Society Dinner

THE Annual Dinner of the Odonto-Chirurgical Society of Licentiates in Dental Surgery was held in the Royal Hotel, Edinburgh, on the evening of Tuesday, the 13th of March, 1900. John Smith, LL.D., F.R.S., in the chair, and Mr. John W. L.D.S., acting as vice-chairman.

The usual loyal toasts having been proposed and duly honoured, the CHAIRMAN rose to propose the toast of the evening "The Dental Diploma." He said that the institution of this qualification was one of the most striking and brilliant examples of the march of advancement in modern medicine and surgery. Time was when specialism and specialists in medicine were regarded with suspicion, and therefore objected to. Time was when even surgeons themselves were specialists, and as such, the mere instruments in the hands of the physician—a state of matters

existing at the time of the union of the crowns, and long after—and when the surgeons were classed with the barbers—then a set of men portrayed as of remarkable vivacity, and sparkling with intelligence. But the time soon came when the surgeons took unto themselves wings, and essayed a higher flight. They had for long been but indifferently educated, but now they became equal to the physicians of their day, and in many respects more than equal, for to the qualifications of the head they added the dexterity and ability of the hand.

At the present time specialisation in medicine and surgery is increasing, and becoming every day more and more recognised as essential to perfection in any department. The eye, the ear, the nose, the throat, the brain, the skin, the uterus—each now has its special practitioner, and who will deny the advantages of the new procedure? All of these, however, have been matured and fostered under the care and solicitude of every medical school throughout the world, and yet their growth has been but slow, as compared with the leap from neglect and obscurity taken by the department of dental surgery—an obscurity even within the memory of some of those now present. It is not from the favoured realms of medicine that the specialisation of dental surgery has been evolved. It has sprung from the dental workshop to the place it now occupies, and it owes its honourable and important status to the convictions, the aspirations, and the determined perseverance of men, except for whom the dentists of to-day would have remained but the artisans and mechanics constituting their main body in the last century.

In those days dentists knew little about surgery, and surgeons knew little, and thought less, about dentistry. Times are now changed both ways, and the dental speciality is become no longer a distinct and separate craft, but one of the developed departments of medicine, to which the individual practitioner may select to confine himself. All this the dental diploma has done. It has secured for the dentist a high and recognised professional position. It has required of him a literary and scientific education. It has secured for him a special dental training; and it has also secured for him a medical and surgical training, so thorough, and so close to that of the general practitioner, that a large proportion of dental candidates are now, with a very trifling addition of study and expense, going in for the full medical qualification besides. We know that no amount of attendance

on the ordinary medical curriculum will ever make a dental surgeon. It is the study required for the dental diploma alone will qualify for that. But although no mere medical training will ever make a surgeon or a physician into a dentist, it will make a dentist either a surgeon, or a physician, or both.

The ophthalmologist, the orthopœdist, or the gynecologist undertake the treatment, not only of the outward and visible lesions or morbid effects, but of the constitutional causes of the local diseases characterising their specialty; while there is no doubt that the dental licentiate, pure and simple sometimes feels a sense of trespassing when he undertakes the treatment of diseases involving life and death, even although he knows, and is convinced, that such disease accounts for all his patient's symptoms.

All this, however, is only by the way. Many different and esteemed opinions have been advanced, and prevail upon this matter; and I am convinced that each in expressing these opinions either way, has spoken from his heart, and for the welfare of the profession. We have made a great move, however, in obtaining the Dentists Act, and with it the dental diploma. We meet under such favourable circumstances as would have been incredible not more than fifty years ago. We have but to join together in doing what we can to maintain, or even to advance what has been achieved, and to enhance the value and the respect of the dental diploma—a diploma which without, and independent of, the aid of any superadded or extrinsic qualifications, stands at the present time as the only guarantee of the dental surgeon being fit to occupy the responsible and honourable position which he holds.

Dr. CADELL proposed the "Odonto-Chirurgical and kindred societies." He was pleased to see the efforts that had been made, and were being made to organise and combine the dental professions by such institutions. Besides their own, there was established the Odontological of Great Britain and the British Dental Association—large and flourishing institutions. These were doing work without which it was impossible to maintain the status of any profession, and it was very gratifying in the case of the last of these, to see the determined and active protest that it made against charlatanry and quackery in its varied forms. But it would not merely inveigh against the blatant and obtrusive announcements which met one at every street corner, and would ought, at all events to thinking people, to carry their conde-

tion on their face ; but there were insidious, though none the less objectionable, methods—by no means confined to the specialty of dentistry—which could not be reached by acts of Parliament however framed, and though it was impossible to suppress them, yet the existence of these societies, where members met in social intercourse, did much to create a good fellow-feeling of better understanding between man and man, and thus strengthen those who endeavoured to lead a professional life in the true sense of the term. He had much pleasure in associating with the toast the name of the President of the Odonto-Chirurgical Society, Dr. W. H. Williamson.

Dr. WILLIAMSON, in replying, said that the Odonto-Chirurgical Society had done good service in the past in having been the pioneer of any social and professional intercourse that might exist in the dental body in Scotland. Thus the way was paved for the British Dental Association, who made an easy conquest when the Scottish Branch was formed. In spite of the necessary restriction in numbers, its practical work showed a large proportion of working members. It was not so fortunate as the big sister society in London, which had not only the great metropolis to draw upon, but also the great animal kingdom, represented by the "Zoo," and which had latterly furnished a considerable amount of interesting pabulum. Still, as in nature, everything must be governed by the nature of its surroundings, and if they lived up to them, all was well. In conclusion, he hoped that the change in the time of meeting would be of advantage to the Society in their next session.

Mr. HEPBURN, in giving the "Licensing Bodies," said it gave him great pleasure to propose the toast, which had been placed in his hands, not because he knew that it would require few words to commend it to their notice, but that he felt it was at once an honour and a privilege to give it. He knew that he had only to name the licensing bodies to call forth a hearty and warm response from all present. The toast was wide and comprehensive, and he feared he would be bankrupt in language were he to attempt to pay a tribute to all the licensing bodies to whom they were indebted. He would therefore with their leave take shelter behind the "statute of limitations," and only reckon with those to whom they were most deeply indebted, and more nearly connected. He meant those bodies in England, Ireland, and Scotland, which granted licenses in the several branches of medicine

and surgery. They must all be familiar with the history, objects and aim of these bodies, and he felt that it would be superfluous to do other than allude to them generally. They must all be aware that these were national institutions, passing from one generation to another, with an influence which was ever widening, responsibilities increasing with their increasing years. They were heirlooms held as a sacred trust, not for the benefit of the present but for the good of all. It was that which gave them the right to be, and secured to them the honours and privileges which they now enjoy. How the gentlemen who had accepted that trust from time to time had fulfilled their obligations was evidenced by the numbers which year by year passed through their hands, joining that devoted band who had to fight the battle of life against disease in its multitudinous forms, and who may be said to be daily at grips with death. There was, he said, no country in the world, and few places in most countries where their collective and beneficent influence was not felt, few fields in the several spheres of science, literature and art, where they had not won laurels which had brought fame and renown, not only to the institutions which sent them forth, but to the country which gave them birth. If these institutions have been accused of lagging behind the age, they have shown when the strain came that they were equal to the occasion, and able to take advantage of every opportunity to increase their influence for good, to promote the objects for which they were founded. To them they, as a profession, owed a deep debt of gratitude; if they had to knock rather loudly at their gates, and wait longer than they anticipated ere they were opened, that but enhanced the welcome which they received when their claims were recognised, and they were admitted to share the honours and privileges which connection with such institutions must ever confer. The individual members of both professions had ever shown a generous readiness to support their claim to public confidence, wherever they were satisfied they were specially trained for their work. He began to couple with the toast the name of a gentleman who had honoured them with his presence that evening, Dr. Peel Ritchie, President of the Royal College of Physicians—a gentleman who had attained his high position not by any fortuitous circumstances but by many years of long and earnest devotion to the profession in which he now held so distinguished a position.

Dr. PEEL RITCHIE expressed the pleasure which it gave him

to be present on the occasion, and to reply for the licensing bodies whom he had the honour to represent. It would be most gratifying to them to know that the members of the dental profession fully appreciated any privileges which their connection with them might confer, and also that they had honourably maintained the position so recently acquired. They were now able to send forth men fully equipped in all the special requirements of their art—men who did honour to their profession and to those bodies on which the onerous work of examination fell; and he could understand and fully appreciate the benefits which must accrue to the public when thoroughly trained and skilled men came to render their services. In the name of the licensing bodies he begged to thank his friend, Mr. Hepburn, for the manner in which he had proposed the toast, and had coupled his name with it, and also those gentlemen present who so fully endorsed it with their hearty response.

The CHAIRMAN said that there was one toast not upon the list, but which he was sure would commend itself to every one present as worthy of the most cordial acceptance, and that was the health of a gentleman who had given much time and trouble in forwarding the interests of the dental diploma and the dental profession. He alluded to Mr. Mackersey, the indefatigable honorary secretary of the Edinburgh Dental Hospital, whose health he now begged to propose.

Mr. MACKERSEY, in reply, said, there was no more unselfish body of men—men who did so much gratuitous work for the benefit of their fellow creatures—than those who practised medicine and surgery in its various branches. They all had duties to perform towards the community at large, as well as in their personal and private relations, and any work he did for the Dental Hospital was undertaken with pleasure as well as from any such feeling of obligation. It was besides always pleasant to be connected with a flourishing institution, and such their annual report had incontrovertibly shown theirs to be, and he looked forward with confidence to the not far distant future, when prosperity should become still more prosperous.

In the course of the evening a telegram of congratulations and good wishes was received by the chairman from some members of the society, and other dental friends, met at Mr. Hepburn's house in London. A suitable reply was returned. In the interval of the more serious work of speech making, various contributions

were made by those members present gifted in the direction of music and elocution.

MINOR NOTICES AND CRITICAL ABSTRACTS.

Gangrenous Abscess of the Lung, probably caused by the Stump of a Tooth passing into the right Bronchus, treated by Puncture and Drainage. Recovery.

BY WILLIAM STRANGE, M.D.,

SENIOR PHYSICIAN TO THE WORCESTER GENERAL INFIRMARY.

It is the great and justifiable boast of modern surgery that it has carried its operations into the great cavities with a certain success and success almost equal to that which it has long claimed when dealing with the external organs of the human body. But I think that the physician of to-day may equally pride himself upon the increased exactitude of his diagnosis of diseases of the internal organs, and assert that, without the assistance of this more exact discrimination of the seat and nature of these diseases, the success which the surgeon claims for his bold operations would be very much reduced. Take the splendid achievements of modern surgery in regard to the abdominal cavity and its contents. Section, incision, ablation, or mere exploration of the abdomen is now undertaken with almost as light a heart as the reduction of a strangulated hernia or the removal of a necrosed bone. Yet it was the physicians who showed the way to this greater certainty and boldness of operating by bringing to bear upon the diagnosis of such cases greater acumen and greater discrimination than has ever before been used. And the same endeavour after greater certainty of diagnosis has been made in the case of the other great cavities, those of the chest and the cranium. We must admit, however, that a similar advance has not yet been made in these regions. We may ask if this difference arises from greater dread of the results of opening the cavities of the chest and the cranium, or from consciousness of defective diagnosis? Scarcely the former, because until a quite recent period no cavity of the body was held so sacred, so unapproachable, as that of the abdomen. Now, we do not scruple to open it for all sorts of reasons, nor hesitate to explore its contents, even when our notions as to what we shall find there are of the very haziest kind.

It is, then, probably the other matter which acts as a deterrent, namely, defective diagnosis. And I rather believe this to be so, because, whenever a fairly easy diagnosis can be made, men have not been deterred from thrusting, for instance, a trocar into the cavity of the pericardium, or into the ventricles of the brain, or, as in the case I am about to relate, into the lung itself. And yet, in the case of the pectoral and the cranial cavities, it is not quite the difficulty of making an exact diagnosis only which makes us pause, but to some extent the difficulty, when we get there, of finding what we are in search of, caused by the natural repugnance of the brain and the lungs to be meddled with; and the difficulty, or rather the impossibility, of turning them inside out, as we do the contents of the abdomen. When, however, the diagnosis is simple and the necessity urgent, we need not hesitate to open the pectoral cavity and its enclosure, the pericardium. In some cases it is not difficult to conclude that the latter is full of serum, and that the action of the heart is becoming fatally impeded thereby. My friend Mr. Wheelhouse, of Leeds, some time ago rescued from impending heart suffocation a case of this kind, and others are on record. Again, large cavities within a phthisical lung are easy of discovery. The puncture and evacuation of their contents has been practised on several occasions, but hitherto with small results as to any benefit conferred by it. Puncture of the skull also, when the diagnosis is easy, as in some cases of chronic hydrocranium, is a simple, and sometimes a successful, operation.

Successful puncture or opening of the skull to remove tumours in cases where the diagnosis has been worked out by the most splendid efforts of inductive reasoning, which has been done lately by Dr. Ferrier and others, is one of the medical marvels of the last few years.

E. M., a robust young woman, aged 23, with well-developed chest and fine physique, and in good health, although in infancy she had been the subject of scrofulous abscesses of the hands and feet, took chloroform for the extraction of several stumps of teeth, on February 17th, 1887. A few days afterwards a troublesome irritative cough came on, with slight muco-purulent expectoration. This condition continued until the month of June—four months. During this time she was never entirely laid up, although frequently confined to her bed for two or three days; nor did she lose very much flesh or appetite. The cough continued to annoy

her greatly; the expectoration increased, and the strength began to fail. She was first seen by me as an out-patient, at the Infirmary on June 8th, and on the 15th her case appeared to be serious that she was placed under treatment in a private house.

Symptoms.—There was almost incessant cough, preventing a sleep, except by the use of narcotics; large muco-purulent expectoration, which was very offensive; coarse *râles* were heard over a large area of the centre of the right lung, extending from the upper third of the scapula down to the ninth rib vertically, and from close to the spine to just above the nipple transversely. In front, there was great tenderness over the third, fourth, and fifth ribs, but no pointing or bulging of the intercostal spaces. Over the other parts of the lung respiration was free and normal, with the exception of some dulness at the base. The left lung was rather hyper-resonant. The paroxysms of coughing continued unceasingly for several hours at a time, almost abolishing sleep. There was not very much loss of flesh; the appetite good; pulse 110; temperature 102° F.

At a loss to conjecture a sufficient cause for this condition of the lung, all signs of pneumonia or of tuberculosis being absent, I fell back upon the history of the tooth-drawing business. From the account given to me by a young friend who accompanied the patient to the dentist, it appeared very probable that a stump had escaped the operator, and had passed down the trachea into the right bronchus. This idea was confirmed by the friend stating that there was great searching of the mouth for a stump, and some alarm expressed. Further, she stated that before the patient applied to me at the Infirmary, rings of cartilage, showing necrosis, were found in the sputum, which was horribly offensive. From June 15th to July 18th the case continued to increase in severity and urgency. The cough was almost incessant; bad bedsores formed from the continuous sitting posture; the temperature, however, only varied between 101.4 and 99°, and was otherwise normal.

The pulse on June 16th was 146, on the 19th 160, then it fell gradually to 120 on the 26th, again rose to 140 or more, and finally dropped, under large doses of brandy, to 120, where it remained until July 18th, the thirty-third day of treatment, a full five months from the date of the tooth drawing. During the whole of this time hectic fever continued to consume the patient's strength. The expectoration was putrid to the last degree,

room, and also the house itself, being only rendered bearable by chlorine gas freely used, with deodorants to the sputum. For some time past the sputum had contained a large quantity of broken-down pulmonary tissue, which settled in quantities to the bottom of the vessel. From two to three pints of this stinking stuff were expectorated daily. Occasionally it ran in a stream from the patient's mouth, and this caused a very tiresome aphthous condition. Large amphoric breathing with metallic tinkling was now heard in the centre of the lung over a space of over four inches square.

The hope that the abscess would finally empty itself, and give the patient a chance of recovery at length died away. The quantity of pus expectorated was increasing instead of diminishing, and the strength was reduced to the lowest ebb by the violent hectic and loss of sleep.

Having now, on July 18th, five months from the access of cough, to deal with the above named state of things, namely, a gangrenous abscess of very large dimensions, with continuous destruction of lung tissue, and which abscess had certainly existed for thirty-four days, if not longer, I came to the conclusion that nothing but puncture of the lung, reaching the abscess, and draining it, would give the patient any chance of surviving, even for a few days. Sir W. Foster had seen the patient with me a few days before this time, and, although disposed to recommend a little more delay, he agreed with me that puncture would probably have to be performed to give the girl the only, though a remote, chance of recovery.

July 18th. Convinced myself that even another day's delay might prove fatal, I resolved to operate. Assisted by my colleague, Dr. Crowe, the needle of an aspirator was pushed quite home into the chest, just below the ninth rib, and at one inch behind the axillary line. A drop of pus appeared almost at once. Withdrawing the needle, a large curved trocar, nine inches in length, was thrust in its track to a depth of about eight inches in an upward and forward direction towards the fifth interspace in front. Pus of the same stinking character as that expectorated followed in large quantity. A drainage tube was now pushed home through the cannula of the trocar by means of a probe, and the trocar was then withdrawn. The wound was dressed antiseptically with plenty of carbolic tow. There was no bleeding, nor any escape of pus or air into the pleural sac.

The subsequent history of the case may be given very briefly. Immediately after the puncture the expectoration lessened to great extent, and in a few days quite lost its gangrenous odour; nor did any lung tissue now appear in it. The cavity was syringed out with fluid *sanitas* once, sometimes twice, a day; but in two or three days the discharge was reduced to small dimensions, and quite lost its offensive smell. The rapid diminution in the quantity of pus discharged after drainage was set up proves, I think, that the secretion of such immense quantities had been kept up by the presence of the pus itself in the lung.

The condition of the patient improved so rapidly that in a few days hopes of recovery could be entertained. The pulse, indeed, remained small and very feeble, about 120; but the respiration became much easier, and fell from 48 or 50 to 36, or thereabouts. She was now able to lie down, which for weeks she had not been able to do. The night sweats diminished, and sleep was obtained.

Ten days after puncture the patient had so far improved that she ventured to leave her to attend the meeting of the British Medical Association in Dublin. On the twelfth day after puncture the tube was taken out and shortened about two inches, as its extremity was causing pain in the lung, apparently from the granulating process going on in it and the tube impinging against it. It was exchanged for one of larger calibre, in the hope that the tooth stump might be expelled through it, but it never appeared. On August 17th, the sixty-fourth day of treatment, and the thirty-second day after puncture, the tube was finally withdrawn, the discharge having practically ceased. The wound soon healed. The condition of the lung at this date was as follows: There were a few small *râles* over the central portion of the abscess space, normal respiration having returned to the greater part of the lung. There was some distant amphoric breathing in the centre, and some dulness below the point of puncture, but there was no evidence of any pus being contained in the pleural cavity. Where the dulness there was appeared to be owing to the compression which the lung had undergone by the abscess. Expectoration slightly mucoid; no smell; still a little irritative cough; the hectic gone; the bedsores, which were very severe and tending towards gangrene, showing signs of improvement; appetite returning; temperature generally below normal; pulse 114; very weak.

The treatment throughout was, of course, of the most sustained and liberal character, with wine and brandy in very large quantities. 'Furpe

tine inhalations were used when it was possible for the patient to breathe them, and terebine was given internally, but without much apparent benefit. Large doses of quinine, arsenic, and iron were given so long as they were required.

On September 12th, seven months after the accident, and fifty-five days after puncture, she was discharged cured. She went out for a drive for the first time on that day.

Condition of the lung at this date: The respiration was everywhere normal, except a slight dulness at the base, where it had always been dull, and a very little amphoric breathing just in the centre. There was cough at times, especially on exertion, or on taking a long breath, and some mucous expectoration. There was considerable flattening over the site of the abscess, otherwise the chest was rapidly resuming its former fine development. Her appetite was good, and she was rapidly laying on flesh. The bedsores were still unhealed, they having caused an enormous loss of muscular structure.

Condition on October 27th. Eight months after accession of mischief, and six weeks after last report, she had gained flesh to the amount of two stones; her appetite was good; she could walk alone a short distance. There was some irritative cough on exertion, owing, probably, to the cicatricial contraction of the lung tissue. The breath sounds throughout the affected lung were entirely normal, except a little remaining dulness at the base. There was no pectoriloquy, metallic tinkling, or amphoric resonance. In fact, all signs of this immense abscess and its cavity had disappeared.

REMARKS.—Cases of gangrenous abscess of the lung are not very uncommon, particularly where old bronchiectasis exists. A few such cases have been treated by incision. Two, to which Dr. Saundby has kindly referred me, were reported March, 1886, to the Royal Medical and Chirurgical Society, by Dr. C. T. Williams and Mr. Godlee. They were both cases of bronchiectasis, treated by incision and drainage. These gentlemen held that the indications for operation were (1) the disease confined to one lung, (2) situate in the lower lobe, (3) with adherent pleura. Of course it will be seen that in my case bronchiectasis was entirely excluded. There had been no evidence of any abnormal condition of the lung previous to the tooth-drawing. In fact, the patient was up to that time in perfect health. It may be thought that there were some favourable circumstances in this

case which tended towards the hope that a happy issue would crown the operation. It may be supposed that the abscess had crept up close to the pulmonary pleura, so that a small depth of lung only had to be punctured. Adhesion to the costal pleura may also be supposed, preventing the shedding of pus or air into the pleural cavity, and the setting up of either an empyema or pneumothorax, or both. I do not believe that any of these favourable conditions were present in this case. First, because the pus was not reached until about seven inches had been traversed by the trocar; and, secondly, because there had been no pleurisy capable of glueing the two surfaces of the pleura together. Both auscultation and percussio pointed to the presence of a considerable layer of sound lung between the pleura and the abscess wall, which layer was at least several inches thick. If I am called upon to explain the absence of bleeding at the operation, and of effusion of air or pus into the pleural cavity, I can only say that I attribute it all to the resiliency of the healthy portion of the lung, and the pressure exerted by the close-fitting piece of elastic tubing which was inserted immediately after the pus had been evacuated.

Footprints of a Profession or Ethics in Materials and Methods.

BY HORATIO C. MERIAM, D.M.D.,
HARVARD UNIVERSITY DENTAL SCHOOL.

AN admirable address on the ethics of our profession, delivered by Dr. Meriam before the Maine Dental Society, has reached us. In it the writer deals with the relation of the profession to the dépôts, and also with the practice of making profit, either by patents or commercial arrangements, out of dental inventions. After a few introductory remarks, and a pleasant quotation from Oliver Wendell Holmes, on currents and counter currents in medical science, he proceeds as follows:—

The vast amount of our material and the range of our methods make the dentist inventive and ingenious. But are they not calculated, unless balanced by a high professional standard and controlled by ethics, which with us may be defined as "that which relates to our actions to each other and to our profession, their motives and tendencies," to *unmake* him as a professional brother, mar the pleasant association that should exist between

honorable gentlemen, carry him into the rank of trade, and thus prevent his ranking with the other specialists of medicine?

We have no reason to criticize "dental dépôts." They were the delight of student days, and even now many can exclaim as did Goldsmith of his muse

"Thou source of all my bliss, and all my woe,
That found'st me poor at first and keep'st me so."

But they serve as a means to mark our standing as specialists. A stream cannot rise higher than its source. And as the "dépôts" are fed by the profession, they show at once our comparative ranking with medicine. As we are specialists in medicine they should be to us what the apothecary and the maker of surgical instruments are to the physician and surgeon, the oculist or the aurist. Let us examine and see if it is so. The makers referred to are not permitted to control supplies and through this the profession. We hear that a large house has acquired control of all patents on the dental engine, and is thus at liberty to manufacture such only as it may wish, and place its own judgment instead of the profession's. Not long since I was informed that a dental chair, the invention of a dentist, had been bought and withheld from the profession. I heard within a few months of a hand-piece that a manufacturer had bought for five years, and had thus for that time prevented its coming into competition with those of his own make.

Many of our journals are published and controlled by dealers, and often contain articles in the text advertising materials for sale by their publishers. We often see recommended or offered for sale to the profession articles and medicines, the formulas of which are not given. One of our dental societies in New York holds its meetings in the dental dépôts of certain dealers. I have heard that at its last meeting it refused permission to another firm to exhibit before it, saying "that they had granted to the first-mentioned dealer the exclusive right to exhibit" before them, and those they had invited from all parts of the country, the firm thus completing the capture of this society body and science.

Now I have looked on³ these questions with care, and I cannot see but that they are perfectly right in all that they do, or have done, if dentistry is a trade and we are tooth-carpenters. But if dentistry is a branch of medicine and we its practitioners, then our druggists and instrument makers, then it is wrong from

the foundation up. But we are its foundation. If the de-
grind, we turn the wheel and feed the grist. We have surrendered
to them the right to select for us and now complain because they
exercise it. The brother who sells his invention instead of bring-
ing it before his society or the society which allows him to do so
are the ones to blame ; not the dealer who buys it and shelves it
if to his advantage. Surgical instrument makers would soon learn
to do this if the medical profession would permit. Was the
manufacturer to blame who bought the hand-piece for five years
and withheld it to protect those he had in the market, or the
professional brother who sold it? What would be thought of
Cheever or a Hodges or any leading surgeon who would do such
a thing? Yet it would be right if medicine were a trade and
they repairers of the clavicle and menders of femurs.

Perhaps Metcalf & Co., or any other large chemists or druggists
would be delighted to provide rooms for the Massachusetts
Medical Society, but do you think that they would ever dare
go to that society or that that society would listen to such a
proposition? Do you think that a New York medical society
would grant to a maker of surgical instruments the exclusive right
to exhibit before them and their guests, like the exclusive right
to sell soda water at a mechanical fair? Yet this would be right
the representative of any trade. What would be thought of
Bigelow, and how would his name go down in the history of
medicine, if he had asked or received from his brothers a royalty
for each time they had performed his operation for stone, or sold
his instruments so that they could be withdrawn from competi-
tion with those already in the market? Or even patented and
received a revenue on their sale? We are all in the same boat.
The principle is the same with the brother who sells his patent
and the Sheffield or the Rubber Company who buys. We object
to being squeezed, but will sell an invention by which men may
squeeze our brother, and complain that they have thus acquired
the power to squeeze.

A society should be simply a committee of the whole,
which to be a member is simply to be one of a brotherhood
whose motto shall be Truth. The study of each should not be
first, what can I get from it, but what can I bring to it. He who
realise that his needs are also his brother's, and will feel shame
withholding aught that he knows or learns that will help that other
in his work for man. The society will have for him the first cla-

on all he can bring to the profession by hand or brain. The manufacturers may take it up after. They will in time learn that they must make what the profession wish, not what they may want to make. The society will recognise that the relation in which they stand to the community that trusts them, requires that they should investigate all new inventions, materials and methods, and see that they are brought before them for such investigation. This will secure to every man the right to have his productions so treated, and prevention or attempt at prevention of such investigation or improvement from any source be realised as an attempt to swerve from honour and duty. In thus presenting them we and not the manufacturers will be made the judges of their merits, and suppression will be rendered impossible. He will maintain the professional position as a patron of dealers, not a dependent.

The ideal member, as one of a liberal profession, will realise that his highest honour comes through the faithfulness with which he serves mankind through his profession, and that the highest honour of a manufacturer or dealer will be found in the faithfulness with which he aids him, and that no research, discovery or invention that he may make, will be treated so as to reverse their position. He will assume that all the world desires to aid him as he aids it, and feel at liberty to call for such aid wherever it can be found. His position will prevent his keeping others, by patent, from engaging in any work or service for their profession or the world. For to do this would make the claims of his profession, to science (to know), to liberality, or philanthropy a pretence, and thus powerless. "Pretence," says Emerson, "never wrote an Iliad, nor drove back Xerxes, nor Christianized the world, nor abolished slavery." He will hold to his right, know the origin, nature and formula of all his materials and medicines, and it will be a simple thing for him to decline to recommend articles and methods patented in his profession or materials and medicines of which the formulas have not been given.

I cannot see the justice of such men as Dr. Black, or our own Andrews, working on year after year in faithful earnest work, a work that they can best do, a work that can never be repaid by the profession, while another may see elsewhere a mechanical contrivance, apply it to dentistry, then sell to a dealer for thousands. For the work of each is but their work or thought or idea for their profession. And why should the one whose work must be

wrought by research and investigation be placed at the mercy of him who works his out with tools in brass or steel. Nay, even should he wish to improve an appliance, the privilege may be denied him by the fact that it has been covered by a patent taken out by the illiberal brother.

Some time since one of our profession said that he read the advertising pages of our journals first, and did not doubt but that others did so, if they would own it. I believe this. But, gentlemen, it shows that our new materials come to us through the advertising pages and through the dealers, and not from the profession through the meetings of societies like this, and the reading pages of our journals as they should.

A member of our profession cannot do with honour that which is a disgrace to a physician, nor can we, if we permit it, receive honour from the community, nor our schools receive that position and endowment that is so freely given to institutions that rest on liberal foundations, including charity, science and philanthropy, unless we place ourselves in line with the physician and surgeon, and show equal zeal in maintaining our profession, straight in truth and fair in honour. The profession should take a position that will make future Sheffields and Richmonds impossible.

Some may think that these are positions too strong for our profession to take, but they are only such as are called for by our claims to be specialists in medicine and members of a liberal profession. Though it may matter little to the public that we are what we wish to be thought, it should, however, always matter to ourselves.

The writer goes on to quote from the code of ethics of the American Medical Association and from the bye-laws of the Odontological Society of Great Britain, clauses which forbid members to have secret remedies, or to hold patents for appliances, and then concludes as follows :—

Has any American Odontological Society a voice on these questions?

Any liberal medical society would expel or debar from membership one who patented instruments, material, method or medicine. To disprove my words you must show that Williams, Bigelow, Hodges, Bowditch, Cheever, and others have patented medicines and methods. Not what you and I *may think* but what men like these *do* is to determine these questions.

Name the medical school that is using patented methods.

medicines; the professor or teacher in one who withholds any information or who is obliged to say, when asked by the students, that "he does not know," it has never been open for the profession to learn; the medical authority or text-book that mentions patents or secrets except with contempt. Tell, when the delivery of instruments, invented by surgeons, has been prevented by threats of litigation or purchase. Can any of their makers boast that they own so many patents that members of the profession cannot put before their brothers improvements without their consent? Does the medical or any liberal profession march bound behind the triumphal car of a combination of its dealers?

A short time ago there met in the workroom of a maker of surgical and dental instruments, two specialists; one a surgeon, the other a dentist. The first could have made what he wished, where he wished, and how he wished, from all the appliances in medicine and surgery that his fellows had produced; the maker could carry out any order of his. But had the dentist ordered there all he needed, the maker would have had to say:—"I cannot fill your order; those things are patented." Would a title of M.D. have placed the dentist on the same footing as the other?

At the last meeting of the Massachusetts Dental Society I called on Mr. Schmidt, of New York, to state how long he had been an instrument maker. He answered, "Twenty-six years." "In that time have you ever been obliged to refuse to make an instrument for a member of the medical profession because it was patented?" "No, sir."

At my side are catalogues of large makers and dealers for the medical profession, and also the trades. The trade catalogues are full of patented articles of all kinds. The catalogues of medical and surgical instruments are not so marked in a single instance. How shall we rank *dental* catalogues? Where do they belong? With the trades or with the professions? It matters not now. But let us see to the future, so that, as any one of us may look back on his life, he shall not say dentistry has been with me a "specialty of medicine" "for revenue only."

Angeliomata in the Mouth.

BY F. TREVES.

At a recent meeting of the Pathological Society Mr. F. T. showed specimens of angioma in the mouth, two of the tongue and one in connexion with the tooth. They were arterial angioma, and Mr. Butlin made no mention of them in his lecture. The first specimen came from a man aged fifty-seven, who belonged to a remarkable family of nose bleeders without true hæmophilia. For the last four years the epistaxis had ceased, and instead he had bled from the tongue, at least three times during this period. This bleeding was seen to be due to vascular growths at the posterior part of the tongue where two large ones existed. Treated with chromic acid the growths receded and the lingual bleeding disappeared, to be replaced by the epistaxis, which had continued ever since. Baumgarten had written a treatise on epistaxis, in which he maintained that erosions and vascular spots situated on the cartilaginous septum or on the nasal floor, or sometimes on the inferior turbinate bone, were the causes of the epistaxis; they might be regarded as minute arterial angioma like those on the tongue. The second case was that of a woman aged thirty-one, on whose tongue, though well developed, there existed a small raspberry-like body at the edge, which was compressed and easily filled again. Frontal headache was a distressing symptom till the tumour appeared, when the hæmorrhage seemed to relieve the headache, but the bleeding required treatment. Arterial bloodvessels collected together in a lump were seen in microscopical appearances. In the third case a woman twenty-nine also suffered from headache, and the tumour, the size of a large cherry, appeared during pregnancy between the two right incisor teeth of the upper jaw, and had loosened the teeth; it was pulsatile, unlike the others. It bled only on pressure at first, but afterwards spontaneously. The arterial angioma removed, the right lateral incisor coming away with it. The angioma grew from the periodontal membrane about the neck of the tooth. Mr. Salter mentions in Holmes' System of Surgery such angeliomata.—*The Lancet*.

Cocaine in Tooth Extraction.

THE employment of certain salts of cocaine, and even the alkaloid itself, in dental surgery, has now received a fairly wide trial. It must be confessed that authorities here and abroad have arrived at very various results, some averring that cocaine is in all cases successful, while others have relinquished its use. To reconcile these discordant statements is at present quite impossible; we can only indicate the best means of applying this anæsthetic, and warn against its indiscriminate use. As a rule, from half a grain to a grain of the hydrochlorate dissolved in ten minims of water, and injected into the tissue of the gum by two punctures, one on the lingual and one on the buccal aspect of the tooth, ensures a painless extraction. It is best to inject very slowly, and to wait from five to ten minutes after the completion of the last injection before extracting. However, in some persons cocaine fails entirely, nor is it possible to anticipate in whom it will succeed or in whom prove abortive. Simply painting the gum is valueless in tooth-extraction, except as a preliminary to the punctures of the hypodermic syringe, for some persons are as much afraid of the pain incident to the pricking the hyperæmic gum as they are of the more severe operation. Although many persons experience no unpleasant effects from the injection of one grain, yet a certain proportion are painfully and alarmingly upset by its action. Syncope, extreme respiratory distress, feelings of complete prostration lasting for hours, vomiting, great nausea, facial paralysis, muscular paresis, and swelling of the tongue may ensue; thick utterance has been present in many cases; while vertigo, headache, and hallucinations are not uncommon sequelæ of cocaine given hypodermically. As a rule, these symptoms, although very alarming at the time, pass off in a few hours, but may persist for days. Cocaine sometimes loses its anæsthetic powers after the first injection. Many do not recommend cocaine for prolonged dental operations, preferring nitrous oxide gas, which is sure and safe, for short procedures, while others lean to a combination of the two agents.—*Lancet*, March 17th, 1888.

OBITUARY.

Mr. William M. Adamson.

WE are sorry to have to record the death of Mr. William Mackintosh Adamson, at the age of thirty-three, which took place on the 2nd inst. Mr. Adamson was a member of the British Dental Association, and one of the assistant dental surgeons at the Glasgow Dental Hospital.

Mr. George Hilditch Harding.

It is with sincere regret that we note the death of Mr. George Hilditch Harding, a younger brother of the universally respected President of the Central Counties Branch, Mr. W. E. Harding of Shrewsbury. His sudden departure from an active sphere of work full of promise, is doubly sad on account of his youth—he was only thirty-five years of age. George Hilditch Harding was born at Acton, Stafford, in the year 1851, and was descended from an old Staffordshire family who had lived at Acton for more than two centuries. He passed a preliminary examination with intention of adopting the legal profession, but this not being in accord with the natural bent of his inclinations, the law was abandoned for the dental profession. He was a student of Thomas's, and of the Dental Hospital of London, at the time when the latter school removed from Soho Square to Leicester Square. After a distinguished studentship he took the dental qualification of the Royal College of Surgeons of England in 1875, and became operating assistant for some time to Mr. Brookhouse of Manchester. Subsequently he assisted Messrs. Elliott and Ranger, and on the retirement of the former became associated in partnership with Mr. Ranger. Upon a dissolution of partnership about three years ago, Mr. Harding became established at 22, Leicester Square, E.C., where he rapidly built up for himself a large and increasing practice. He did not enjoy very robust health, and his constitution, although free from organic mischief, was apparently unequal to the severe strain which is inseparable from a large dental practice. With a view of snatching a short respite from work, he went down to Brightlingsea, where he was taken ill immediately on his arrival, and on March 23rd, after being confined to bed for a fortnight, died from broncho-pneumonia. He was interred at Shrewsbury on March 29th. Mr. Harding

unmarried. He was a member of the Odontological Society, and of the British Dental Association, and his genial face will be missed from their meetings by a large number of the profession.

Mr. T. S. Pearsall.

WE regret to have to record the death of Mr. T. S. Pearsall, which occurred at his residence at Donnybrook, on the 28th of March. Mr. Pearsall was, we understand, a native of Birmingham, and studied dentistry by apprenticeship to Dr. Norman, of Cincinnati, when this fine city was a wooden village, over fifty years ago. Mr. Pearsall practised in several towns in the Mississippi Valley and Arkansas, particularly in the State town of Little Rock, then a village of one street, now a populous city. Mr. Pearsall ultimately settled in Dublin, in 1843. His special bent was in the direction of mechanical contrivance and ingenuity, and in this connection it may be mentioned that he made a tea-service, consisting of forty-eight articles, out of a fourpenny-piece, and this was exhibited at the Hyde Park Exhibition, in 1853. Dental reform came too late for Mr. Pearsall. His name will, however, be well known and respected in our Association, in the person of his son, Mr. Booth Pearsall, the energetic and able secretary of our Irish Branch.

Mr. Robert M'Cracken.

WE have likewise to note with regret the death of Mr. Robert M'Cracken, late of Glasgow, which took place at Stanraer, on the 26th of March.

NEW INVENTIONS.

An Electrical Thermometer.

WE have received from Mr. Braun the following description of an electrical thermometer invented by him, for maintaining the correct temperature during vulcanisation. "In appearance it is similar to the ordinary thermometer, but in the bulb and down the column are inserted two fine platina wires, one of which is soldered to the casing, and the other is insulated and brought through the top to a small terminal. Another terminal is fitted to the casing. The quantity of mercury is so arranged that when

315 degrees is reached the column of mercury makes contact with the platina wire, and by means of a small electro magnet a gas-tight box, through which the gas passes, the armature is brought up in such a manner as to shut off the supply. A small quantity, however, escapes through a bye-pass to prevent extinction. It is worked by a single Laclanche cell, which could also be made to ring an alarm when the time had expired, or automatically turn out the gas, or both. As it is only fair to prevent others falling into the same errors I have made myself, I will describe my former attempts and failures.

"No. 1 was constructed on the principle of the thermostat, in which the gas passes over a column of mercury which rises and closes the aperture—very correct in theory but useless in practice for the mercury at such a high temperature volatilised, and consequently got beautifully less, making things too uncertain to be pleasant.

"My second attempt was to place between two half balls a leather washer, which I thought would rise by the heat-expansion of air and close the gas supply, but it did not. India rubber was tried instead, also a thin German silver disc in vacuum, and an aneroid barometer, but the heat unsoldered the end and made me weary of spirit.

"For some months past I have been using a Griscom motor to drive the dental engine, and find great convenience in having a switch or presette (as they call them at the electrical shops) attached to the hand-piece, which prevents the necessity of going to the wall to switch off. I shall shortly rig up a 10 c.p. lamp in a box with a glass rod projecting therefrom, which I believe will be more convenient than the non-thermal lamp."

ANNOTATIONS.

IN our next issue, we hope to acquaint our readers of the *personnel* of the various committees that are being appointed to arrange the business of the annual meeting. In the meantime it should be clearly understood that in order that these arrangements should be carried out in an orderly and regular fashion, all communications regarding papers to be read, specimens to be shown, or demonstrations to be given should be made to the secretary of the Irish Branch, Mr. W. Booth Pearsall, 13, Upper...

Merrion Street, Dublin. We cannot publish particulars of the prospective programme emanating from any other source, and those who have anything to communicate to the Journal upon the matter will, we trust, see the propriety of making their communications through the Irish Secretary. In order to facilitate the labours of arranging and cataloguing of specimens for the projected museum, it is important that particulars respecting them should reach Mr. A. W. W. Baker with the least possible delay, to avoid the inconvenience of hasty arrangements made at the last moment.

WE hope that there will be no misunderstanding about the object of the museum ; it will be for the benefit of the Association generally, and not in any sense for that of the Irish meeting in particular. The Irish executive have displayed throughout a very broad and liberal spirit in their arrangements, and have shown unmistakeably their desire to forward the interests of the whole Association, rather than those of the branch. We hope that members will not meet the endeavours of the Museum Committee to work up a really good exhibition in a half-hearted or apathetic manner ; it would be a pity to damp the enthusiasm of our Dublin friends by lukewarm co-operation, and early as it is in the year it is none too early to begin arranging materials, placing particulars thereof at the disposal of the secretary to the Museum Committee, Mr. Arthur Baker, whose letter on the subject we publish at page 264.

AN inventive turn of mind is a great gift, but the outcome of it is sometimes dangerous. So at least some of the members of the Liverpool section of the Society of Chemical Industries appeared to think when the latest effort of our friend Mr. Fletcher, in the way of gas-heating appliances, was shown to them. An apparatus which will fuse a hole in a plate of wrought iron a quarter of an inch thick in a few seconds, is an excellent thing in its way, and clearly capable of many uses when it can be carried about in a small carpet bag. The ghost of a man in slippers, armed with silent matches, is said to have disturbed the minds of some of the scientists ; we can, however, hardly credit it. It would be pardonable in the bank manager to be alarmed for his safes ; his soul

naturally rises no higher than his cash box, and his great ambition is to have it said of himself that—

“At a banker's desk like many more
Content to tell that two and two make four ;
His name had stood in city annals fair,
And prudent dulness marked him for a mayor.”

But the soul of a member of the Society of Chemical Industry should take a loftier flight. He should hold lightly to bank notes and title deeds, and welcome every triumph of science and science even though it should chance to render insecure his strong position. Or he should have faith to believe that the scientist who can make a hole in the box, can make a box in which no hole can be made. Mr. Fletcher had feeling, however, for the weaker members, and assured them that there was security in the fact that the agent of destruction was a noisy fellow, and though he knew how to bring out a silent companion, yet he was determined not to do it. Good natured Mr. Fletcher! but—and here a disquieting doubt comes in again—has the burglar fraternity no engineer on his pay capable of improving upon the Warrington skill in circumventing the Warrington good-will? All unworthy considerations apart, however, the subject for the moment is the triumph of a blow-pipe which fuses a quarter of an inch of metal before the onlooker can say Jack Robinson.

A QUESTION of ethics was proposed by a correspondent in the February number, which is somewhat difficult to answer. Our correspondent enquires whether, having filled four teeth with amalgam and two others with cement, and subsequently extracted one of the latter under gas, he was charging a reasonable fee for asking £6 6s., including the doctor who gave the gas, &c. I assume that guinea fees are the rule with practitioners, in such a case, again assuming the average professional skill to have been employed, there can be no doubt that the fee was not excessive. The patient showed the bill to another dentist, who said that he would have done it all for half the sum, and we are asked if this was in accordance with professional etiquette; we think the preceding certainly smacks more of the ethics of a trade than of a profession.

THE last meeting of the session of the Birmingham Dental Students' Society was held at 71, Newhall Street, Birmingham.

Tuesday, March the 27th, Mr. J. Humphreys in the chair, and amongst those present were Messrs. C. Sims, W. R. Roberts, W. Palethorpe, W. T. Madin, E. Sims, P. Sims, G. F. C. Matthews, J. E. Parrot, G. Foster, W. Royal and P. T. Naden. F. W. Richards exhibited a delicate lad of eleven years. Two months ago he had fallen down and fractured the upper right central incisor, driving the upper left central incisor into the jaw and fracturing the alveolus upon the labial aspect from the central incisors to the left upper temporary molars. The case was treated by removing the temporary canines, which were loose, pressing the fractured alveolus back into its place, after removing the left upper central, which was cleaned and replaced in its socket. The teeth were protected with a covering of gutta percha for a week, till the inflammatory symptoms had abated; then a model was taken and a vulcanite plate made to cover all the teeth and the alveolus. This plate has been worn continuously for eight weeks. The alveolus has now apparently joined, and the tooth is firm and has undergone no discoloration, and will probably prove of service for many years. Mr. W. J. Royal read a paper on "The Salivary Glands and their Secretions," after which Mr. W. Palethorpe read an exhaustive paper on "Alveolar Abscess," well illustrated by a number of carefully prepared diagrams. At its termination a long discussion ensued. After the business, a most enjoyable social meeting took place.

DEATH FROM DRAWING A TOOTH.—At Stalybridge, an inquest was held on a child named Blacker, aged five, whose death occurred under the following circumstances. The child had suffered from toothache, and went to a herbalist, who extracted the tooth. Much bleeding resulted, and the child afterwards suffered from loss of appetite and general weakness. She kept growing worse, and died, as was stated, from debility, the result of the loss of blood. A verdict in accordance with the evidence was returned. This account carries its own moral so clearly on the face of it, that comment is altogether unnecessary.

THE Annual Meeting of the Odonto-Chirurgical Society was held on the 13th of March, the President, Dr. Williamson, occupying the chair. After the transaction of the business ordinarily appertaining to such meetings, a paper was read by Mr.

Biggs on Cleft Palate, and by Mr. G. W. Watson on Empyema of the Antrum.

Mr. WEST's letter on the post-graduate course appears on the face of it reasonable enough. However admirable a course of demonstrations may be, and however moderate the charge for it, the extent of its usefulness will largely depend on certain details, of which the hour of meeting is not the least important. "'Tis better to be born lucky than rich," says the proverb, but he must be both lucky and rich who can conveniently give two hours from his professional labour in the best part of twelve successive days. It is true, he may be neither lucky nor rich, and like Lady Clara, find time hang heavy on his hands; but we are satisfied that those who arranged this course never contemplated such a melancholy possibility as that. Meanwhile it may turn out that there was a sufficient reason for the time fixed for these demonstrations.

THE case to which Mr. Browne-Mason calls attention in our present issue is, we understand, a very pressing one. Unfortunately our Benevolent Fund has no disposable monies to assist Mrs. Marks at present; there is, therefore, only personal help to depend upon. It will be seen that the bulk of the sums contributed by professional friends are from members of the Association, a large proportion of whom belong to the Western Counties Branch, of which Mr. Marks was a respected member. Any subscriptions will be gratefully received by Mr. Browne-Mason, or may be sent to Messrs. Watts and Whidborne's Bank, Newton Abbot.

It may not be out of place to hint that now is the time to communicate with editors of post office and local directories, requesting a proof of our professional list to compare and revise with the Dentists' Register.

THE Annual Meeting of the Scottish Branch will be held at Edinburgh on the 15th day of June.

CORRESPONDENCE.

We do not hold ourselves responsible for the views expressed by our Correspondents.

The Annual Meeting in Dublin.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—We are now perfecting our arrangements for the comfort and enjoyment of the members of the British Dental Association, who intend visiting Dublin during the annual meeting of the Association; I would, therefore, ask your kind permission to lay before the members generally some of the plans we have adopted, with a view of arousing an increased interest in the annual meeting, and, what is still more important, the steady progress of the objects of the British Dental Association in the scientific advancement of our profession.

In the first place we desire to make the meeting a *practical* one, where the importance of manipulative skill and the comfort and advantage to be gained by the use of well-designed and efficient tools, will be shown to our members by dentists who are "*facile princeps*" in the numerous demonstrations that will be given. Following out this idea a Demonstration Committee has been formed, under Dr. Theodore Stack's enthusiastic zeal, and a Demonstration Room has been secured, capable of holding twenty or twenty-five chairs, all placed in admirable light. We have received the hearty support of our profession in this direction, and no pains will be spared to add to the attractions of this essential feature of the Annual Meeting. We have also formed an Annual Museum Committee which will consist of four sections: (1) manufactures, (2) literature, (3) surgery, and (4) workroom. The museum will be classified and organized by Dr. A. W. W. Baker, of Dublin, as hon. secretary in Sections 1, 2, 3; and Section 4, workroom, will be organized by Mr. G. M. P. Murray, of Dublin, as hon. secretary.

The Annual Museum Committee has been formed partly by members of the Irish Branch, and largely by members who have been invited to act as representatives of the Midland Counties, Western Counties, Eastern Counties, Scottish, West of Scotland, Central Counties, Southern Counties, Branches of the British Dental Association, and also of some well-known members of our profession who have not, so far, become connected with any of the branches of the Association. Most of the members we have thus invited to take an active part in the organization of what we consider ought to be a very prominent feature at each annual meeting, have accepted their new duties with a heartiness and zest that promises to make our local anxieties and hard work "a labour of love," and we hope that the few who have not replied to our invitation to take part in develop-

ing the scientific attractions of the annual meeting will not feel hurt should they not find their names on the committee when it is published in your columns.

In designing the Demonstration and Annual Museum Committee we have endeavoured to enlist the services of able and well-known men to act as representatives of the branches, feeling that in every way the Annual Meeting should be for the benefit of the members of the British Dental Association in general, not for the "glorification" of the Irish Branch in particular, and we therefore most earnestly call upon the members as a body to promptly make up their minds to attend the meeting, and also to send us early notice of their intention to do so, so that every reasonable and sensible arrangement can be planned and put into working order, under efficient and courteous local members, to make our visitors' "lives happy ones." To organize hotels, lodgings, lunches, conversazione, garden party, annual dinner, and annual excursion, so that *all* our members shall be pleased, is a difficult, if not an impossible, task; but the difficulties can be lessened and smoothed away if some sensible plan of action is adopted and steadily carried out, looking to the accommodation of the many rather than to the special, and sometimes, I fear, exacting, requirements of the few; so that if the members generally should find some of the details a little different to what they have been accustomed at other meetings, they may rest assured that in taking advantage of whatever local conveniences, courtesies, and good will towards the reception of the British Dental Association we have been able to enlist in our organization, we have done it for the advancement of the honour and dignity of the British Dental Association.

You were kind enough in the annotations of last month to dwell upon the excellence of the room we have selected for the use of the annual museum, and to say that lots will be drawn for places. So far as the general lighting of the room is concerned, no bad places can occur. We will be given to any exhibitors, but we have determined, as soon as the replies to our invitations come in from the dental and other manufacturers, to give, so far as we can, uniform accommodation by marking off thereas we are prepared to devote to Section I, then sub-dividing it and numbering the sub-divisions, which numbers will be drawn out of a ballot-box against the names put separately into another box. By doing this we give everyone *fair play*, and all will be afforded suitable conveniences for the display of their goods. Trophies and other ugly fons of arrangement seen at exhibitions will in no case be permitted but the manufacturers are urged to give some attention to their own requirements, so that we can meet the wishes of the majority as far as possible. Even-handed justice will be our procedure in this section, and any firms or manufacturers who cannot fall in with this way of working a museum had better stay away. As to permitting any manufacturer to pick his own place, under threat that he will

absent himself, it is quite out of the question, and such exacting individuals had better fall in with the reasonable regulations we have considered it necessary to adopt, with the full concurrence of the executive in London. In the surgery section we hope to collect and exhibit many examples of disease or abnormal development of the teeth and jaws, and it is not unlikely that the magnificent dental specimens generously given to the Museum of the Royal College of Surgeons in Ireland by the late Mr. Grimshaw, will be specially arranged in the college museum for the benefit of our visitors, many of the cases and specimens being unique. The workroom, Section 4, ought to meet with a hearty response from our members, as hitherto it has not been the policy of the British dental manufacturers to invite or encourage the inventive talents of our professional brethren, and I can promise our members some interesting novelties from contributors in this new section. It has been proposed and adopted for the first time that a catalogue be published and, if possible, circulated amongst the members before the meeting, so that timely opportunity will be given to all to make notes of the specimens or tools they wish specially to study, and where they can be found. The method of cataloguing will be similar to that used in picture exhibitions, namely, by means of labels. In all cases specimens or tools should have the owner's name legibly attached to them, and we hope by next month to be able to report to your readers a considerable amount of work already done for the museum. In the next Journal I hope (if you will kindly permit me) to let our members know something of the social side of our arrangements, and give you particulars of railway rates, hotels and lodgings. "By the tooth of St. Patrick" (it can be seen in the museum of the Royal Irish Academy in Dawson Street, Dublin), we are working like one man over here to make the annual meeting worthy of the best interests of the ideal British Dental Association. In conclusion, may I again repeat that all communications, specimens, tools, &c., relating to the annual museum and annual meeting are to be sent direct to me, and that if our members will generously send on the material we want *at once*, our local committee will be able to arrange the material placed at their disposal so that steady classification and cataloguing can go on, and, by not leaving everything to the last moment, some chance of participation and enjoyment in the genial surroundings of the annual meeting will be possible to those who will have given their energy and their leisure to make the annual meeting a pleasure to the members of the British Dental Association.

I am, dear Sir, faithfully yours,

W. BOOTH PEARSALL, F.R.C.S.I.

13, Upper Merrion Street, *March 25th*, 1888.

The Annual Museum at the Dublin Meeting.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION"

DEAR SIR,—As the arrangements for the museum at the Dublin meeting, next August, are fast being completed by our local committee, we think it a good plan to let the members of the Association know through the medium of the Journal, what we have done, and in what way we hope that they will assist us, as our labours will, to a certain extent, be thrown away without the hearty co-operation of the members of the Association.

The sections of the museum to which I have the honour to act as secretary are those devoted to dental literature, and dental surgery and pathology. In the second or literature section, we invite members to contribute journals, monographs and handbooks, published during the past five years, on dental surgery, physiology, mechanical metallurgy, or *materia medica*. Although we state that the literature should have been published during the past five years, it is not intended to exclude books and documents of historic or antiquarian interest.

In the third section, which embraces dental surgery and pathology, we ask members to forward to us, pathological preparations of diseases of the teeth and jaws, casts of injuries and deformities of the jaw, regulation cases with casts shewing the result of treatment, appliances used in the treatment of irregular teeth, casts of cases of cleft-palate, with examples of obturators and artificial vela, specimens of abnormal teeth, interdental and other splints, with casts of cases treated for fracture of the jaws, photographs of cases, microphotographs, and specimens of comparative anatomy and pathology.

Now as the proper exhibition of specimens, which, in the third section are grouped together under the title of "abnormal teeth," has always been a matter of extreme difficulty, we have thought it well to adopt some uniform arrangement, by means of which the specimens can be most easily seen, and safely returned to those who entrust them to us.

As the use of the Wolrab gold cylinders in stopping has become general, we thought that the little glass bottles, in which they are set out, would form a most convenient jar for holding single teeth.

The method we have adopted hitherto, for fixing the specimen, is as follows :—Cut a section off the end of the cork, about one-eighth of an inch in thickness, fasten to the under surface of the cork by means of sealing wax, some thin silver suture wire, then loop the wire with a single knot twice round the specimen, and bring the wire out through a second section of cork, about one-quarter of an inch thick. The first cork can now be pushed down to the bottom of the bottle, and the specimen kept tight by straining the wire between the two corks. Some sealing wax may now be flushed over the

second cork in the mouth of the bottle, which will keep everything in its place and dust-tight.

The specimens so mounted we propose to place in a series of racks, which will allow the individual bottles to be turned round, and thus viewed from all sides, but so secured, like bottles in a Tantalus spirit frame, that no bottle can be removed except by the curator. We shall be happy to receive specimens mounted in the manner I have described, or unmounted—the latter we will mount so as to display them to the best advantage. A short description of course ought to accompany all specimens, whether abnormal teeth or anything else intended for exhibition, which description will be inserted in the catalogue, subject, however, to such revision as the Museum Committee may deem necessary.

Your obedient servant,

A. W. W. BAKER, M.D., F.R.C.S.I.
Hon. Sec. Museum Committee.

TO THE EDITOR OF "THE JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—Your readers will be pleased, and many of them, I hope, practically interested, to learn that we have decided, at the August meeting of the British Dental Association to be held in this city, to devote a section of the museum to the exhibition of *tools*, including appliances or instruments for use in the surgery or work-room, *made and invented by dentists*, and which have not as yet been brought under the notice of the profession at large through the agency of any of the manufacturers.

This, so far as I am aware, is quite a new feature in the Annual Museum, and we hope that its success may justify the undertaking, and stimulate others to establish similar interesting exhibitions at future meetings.

When we consider that one of the main objects of the Association is the diffusion of ideas, and the establishment of a common property in all professional and scientific knowledge, and that at our yearly meetings we gather together, eager, like the Athenians of old, "either to hear or to tell some new thing," it is to be hoped that many gems of inventive genius, hitherto lying *perdu* so far as the profession were concerned, may now come to light, and find their way to the spacious museum building at Trinity College, Dublin, where they are sure to prove of deep interest and instruction to the hundreds of dentists whom we hope will there have an opportunity of studying them, and where many valuable hints and ideas will, no doubt, be received and given by both exhibitors and observers.

Applications for space should be addressed to the indefatigable

secretary of the Irish Branch, W. B. Pearsall, F.R.C.S.I., 13, Upper Merrion Street, Dublin.

Faithfully yours,

GEO. M. P. MURRAY, L.R.C.S.I.,

*Hon. Sec. Sub-section IV., Museum Committee,
British Dental Association.*

10, Hume Street, Dublin,

March 31st, 1888.

Papers for Annual Meeting.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION"

SIR,—It is much to be desired that some arrangement, as foreshadowed in your annotations this month, regarding acceptance of papers to be read at annual meetings, should be made, whereby it might be assured that none but contributions worthy of the occasion should be ever brought forward. It must be borne in mind that at annual meetings the eyes of the world are upon us; and if papers received which are below a high level as literature and science, reputation, not only of our Association, but of the whole profession, a body is apt to suffer. Scoffing is so pleasant to the average critic and it is so easy to cast ridicule on a profession assembled in sole conclave, to discuss what its enemies may, with show of reason, describe as nonsense. At branch and local meetings the case is different; and, in the dearth of fresh topics, in our limited area of science, it, no doubt, may be right to accept any and every contribution from members. Such papers mostly give rise, at any rate, to interesting and suggestive discussions. It must be a very bad paper indeed which will not serve that purpose. I would suggest that the Representative Board appoint a small committee to deal with this matter—a committee of not more than six members; three would be better and enough. Let it be made a rule in future that all papers for the annual meeting be passed through this committee; and that it be left to them to decide which papers shall be accepted, which read in full, which in abstract, and also what contributions and what abstracts should be (as you suggest) printed and circulated before the meeting. I am very strongly of opinion indeed, that it were better to have papers at all at annual meetings, to be content with discussion of casual communications and specimens, rather than to give up time to productions, which, although perhaps not without some value, are unworthy of such an important special occasion. Lengthy papers, the pith of which were alone valuable, might be epitomised and presented at the meeting in brief abstract. The meeting at Dublin, thanks to the energy, sense and forethought which are being shown by the local branch, promises to be memorable in many ways; and

seems a fitting occasion to put in practice a reform of the character which I have roughly sketched.

Your obedient servant, X.

London, *March 17th*, 1888.

Hyperæmia of the Pulp.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION"

DEAR SIR,—It is with pleasure that I reply to Mr. Morgan Hughes criticism on my case of hyperæmia of the pulp. I am bound to admit that on reading over the notes of my case I am not surprised that Mr. Hughes finds fault with my diagnosis, but hope that the few remarks I am about to make will shew him that I was not in error.

To begin with, Mr. Hughes fails to see, in the history of the case, any reason why I should think of hyperæmia, and he then gives his theory, "that the symptoms were caused by temporary periostitis of the second pre-molar, due to the filling of the canal, &c. ; and that my radical treatment (viz., removing the first bicuspid) cured the case simply by acting as a strong counter-irritant." Mr. Hughes appears to disregard the point which I consider of great value in diagnosing an obscure case like this—the microscopic examination.

My reasons for still adhering to my opinion that it was a case of hyperæmia and not of periostitis are these :—

First, undoubtedly when the patient first visited me there was considerable periostitis, as is usual with alveolar abscesses ; this speedily passed off after treatment of the abscess, and on the patient's third visit there were no signs of any periostitis (the general symptoms of which being pain of a dull, diffused character, affected by temperature, more on lying down, and easier on applying pressure to the affected tooth or teeth, gums often inflamed and thickened, often loosening of the tooth). I may say that not one of these symptoms were present ; but upon excluding all causes which might have given rise to reflex pain, everything tended to prove that the case was similar to an exposed pulp being bottled up with some filling, with this only difference, that one did not get relief upon applying cold water, as is usual with the former case, and also very trifling reactions to the various stimuli.

Secondly, if one should drill into a healthy pulp, certainly only about a quarter of a minim of blood would escape in the usual way, but two drops of light serous blood from a small drill hole is a very large quantity, and this alone almost convinced me that my diagnosis was correct.

Thirdly, the immediate microscopic examination of the blood revealed at once that there was considerable alteration in its consistency, the number of the white corpuscles being very far in excess of

that of normal blood. I do not attach so much importance to the second microscopic examination (viz. : of the pulp after removal of the tooth), but I believe that in a healthy exposure, if treated as I do strictly antiseptically, one would not find such great changes in structure.

Lastly, Mr. Hughes cannot understand why the symptoms of parodontitis (in the first pre-molar) should have come on after my curing the alveolar abscess ; it seems to me quite clear that the vessels to the apparently healthy first pre-molar must have been involved before I saw the patient at all, and they gradually got more blocked up, so as to give rise to this hyperæmia : and I take it as a mere coincidence that the pain came on just after my curing the abscess.

Hoping the above remarks will satisfy Mr. Morgan Hughes ; if not I shall be happy to discuss the matter over with him at some future date,

Believe me, yours faithfully,

JAMES RYMER.

Modern Medical Legislation.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION"

SIR,—To clearly understand the principles upon which medical legislation has been based it is necessary to have followed the procedures of Parliament not only during the passage of recent medical and dental bills, but during the discussion of the numerous unsuccessful projects of legislation brought forward from time to time either by private members or Ministers within late years. Consideration of all that has been said and done makes perfectly evident the ideas which statesmen have firmly adopted in conferring by statute privileges and powers upon professions. And, in parenthesis, it may be noted that in modern legislation for professions other than the medical and its allies, the same ideas may be recognised ; so that, looking at all things, there seems little room for doubt that principles thus settled will shape all future schemes affecting medical practice as a whole or dentistry in particular. I have in view now mostly the question of quackery and practice by unqualified men—a question which you, Sir, have already discussed at some length, and which, rightly, is exercising the minds of many members of the Association. One of the principles uniformly acted upon by the Legislature has been that no privilege should be conferred on any profession which might be merely to the advantage of that profession whilst not demonstrably to the benefit of the public. This principle it is that has shaped penal enactments in all medical and dental bills. At first view it might be reasonably thought that statesmen would be eager to restrict practice solely to the hands of qualified practitioners ; that they would be ready to forbid absolute practice to those not possessing a recognised diploma the pursuit of any branch

of medicine for gain ; but as a fact no such arbitrary restriction has ever been seriously entertained by the Legislature. Of course, every educated professional man is able to perceive the injury to public welfare caused by unqualified practitioners, even in what at first view may seem merely mechanical processes, such, for instance, as the making and fitting of artificial teeth. Ignorance in every department of medicine and surgery is closely allied to cruelty, and it is impossible for an uneducated practitioner, even if he be honest, to avoid often inflicting suffering on patients when treating organs with the physiology of which he is unacquainted. But this fact has neither been generally recognised nor accepted by the public, and has never been acted upon by the legislative bodies which represent the public. A sweeping arbitrary enactment which should at one blow entirely prevent practice by the unqualified would not only be an interference with their liberty—justifiable, no doubt—but it would be an interference with the liberty of the public, who—strange as it may seem—often prefer, knowingly, an unqualified to a qualified practitioner ; and the public will not endure such a restriction. This feeling is not confined to the ignorant, but has its representatives among all classes, and we have recently seen a noble lord who, far from being a fool, is a man of culture, high attainments and uncommon literary power, deliberately and elaborately setting forth, among other arguments of a like purport, his belief in the superiority of quack bone-setters over the best surgeons of the day. The medical herbalist, the medical electrician, and the whole tribe to which they belong, have their votaries and friends ; and no Government would think of forcing upon the country a paternal measure virtually forbidding recourse to these irregular practitioners by those of the public who choose or prefer them. What the Legislature has shown itself willing to do is to prevent irregular practitioners from palming themselves off as qualified men by the use of sham medical titles ; but, as you explained in a recent article, the present medical law is defective and sadly needs amendment in this particular. The Dentists Act will no doubt serve to debar quacks from using any dental title to deceive the public, but this will certainly not entirely prevent unqualified practice. There will still remain nothing to prevent quacks from carrying on tooth shops, or dental establishments, where every dental operation may be performed by unqualified men, who need fear no penalty unless guilty of the false pretences defined by the Act. It is well to look facts in the face, and it would be wrong to ignore this one, which is by no means very serious after all. The disabilities under which, thanks to the Dentists Act, unqualified dentists must labour in conducting practice, such as their lack of status in courts of justice, and the constant danger in one direction or another of falling into the meshes of the law, will tend more and more to lower the average character of the men willing to embark on such a perilous and disreputable career. We may fairly assume that the number of un-

Biggs on Cleft Palate, and by Mr. G. W. Watson on Empyema of the Antrum.

Mr. WEST's letter on the post-graduate course appears on the face of it reasonable enough. However admirable a course demonstrations may be, and however moderate the charge for the extent of its usefulness will largely depend on certain details of which the hour of meeting is not the least important. "It is better to be born lucky than rich," says the proverb, but he may be both lucky and rich who can conveniently give two hours from his professional labour in the best part of twelve successive days. It is true, he may be neither lucky nor rich, and like Lady Clara, find time hang heavy on his hands; but we are satisfied that those who arranged this course never contemplated such a melancholy possibility as that. Meanwhile it may turn out that there was a sufficient reason for the time fixed for these demonstrations.

THE case to which Mr. Browne-Mason calls attention in the present issue is, we understand, a very pressing one. Unfortunately our Benevolent Fund has no disposable monies to assist Mrs. Marks at present; there is, therefore, only personal help to depend upon. It will be seen that the bulk of the sums contributed by professional friends are from members of the Association, a large proportion of whom belong to the Western Counties Branch, of which Mr. Marks was a respected member. All subscriptions will be gratefully received by Mr. Browne-Mason or may be sent to Messrs. Watts and Whidborne's Bank, New Abbot.

It may not be out of place to hint that now is the time to communicate with editors of post office and local directories requesting a proof of our professional list to compare and revise with the Dentists' Register.

THE Annual Meeting of the Scottish Branch will be held in Edinburgh on the 15th day of June.

CORRESPONDENCE.

We do not hold ourselves responsible for the views expressed by our Correspondents.

The Annual Meeting in Dublin.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—We are now perfecting our arrangements for the comfort and enjoyment of the members of the British Dental Association, who intend visiting Dublin during the annual meeting of the Association; I would, therefore, ask your kind permission to lay before the members generally some of the plans we have adopted, with a view of arousing an increased interest in the annual meeting, and, what is still more important, the steady progress of the objects of the British Dental Association in the scientific advancement of our profession.

In the first place we desire to make the meeting a *practical* one, where the importance of manipulative skill and the comfort and advantage to be gained by the use of well-designed and efficient tools, will be shown to our members by dentists who are "*facile princeps*" in the numerous demonstrations that will be given. Following out this idea a Demonstration Committee has been formed, under Dr. Theodore Stack's enthusiastic zeal, and a Demonstration Room has been secured, capable of holding twenty or twenty-five chairs, all placed in admirable light. We have received the hearty support of our profession in this direction, and no pains will be spared to add to the attractions of this essential feature of the Annual Meeting. We have also formed an Annual Museum Committee which will consist of four sections: (1) manufactures, (2) literature, (3) surgery, and (4) workroom. The museum will be classified and organized by Dr. A. & W. W. Baker, of Dublin, as hon. secretary in Sections 1, 2, 3; and Section 4, workroom, will be organized by Mr. G. M. P. Murray, of Dublin, as hon. secretary.

The Annual Museum Committee has been formed partly by members of the Irish Branch, and largely by members who have been invited to act as representatives of the Midland Counties, Western Counties, Eastern Counties, Scottish, West of Scotland, the last Counties, Southern Counties, Branches of the British Dental Association, and also of some well-known members of our profession who will have not, so far, become connected with any of the branches meeting Association. Most of the members we have thus invited to active part in the organization of what we consider ought to be a very prominent feature at each annual meeting, have accepted. C.S.I. new duties with a heartiness and zest that promises to overcome local anxieties and hard work "a labour of love," and to the few who have not replied to our invitation to take part

qualified pretenders attaching themselves in the future to our profession will sink proportionately to insignificance ; whilst at the same time we may with confidence hope, that the bulk of the public will become more and more able to recognise the broad characteristics which must more clearly than ever mark off the educated practitioner from the ignorant pretender and the blatant charlatan.

To frame penal clauses of a medical act which should be at once unequivocal meaning, and of sufficiently wide application to reach all offenders, whilst preserving what is called the liberty of the subject in directions where it really needs safe-guarding, is a task of much greater difficulty than at first sight might be supposed ; and it is this difficulty which has in fact rendered futile many of the attempts which have been made to deal effectually with this matter. For example, an individual may possess a diploma in law, arts or science, giving him the right to the title of doctor, although conferring no legal position in the medical profession. Now (as you have pointed out), there is no legal bar to any unqualified man practising medicine, and, of course, equally no restriction upon a medically-unqualified doctor. Other difficulties come in sight when an attempt is made to deal with cases where custom has sanctioned the use of medical designations by the unqualified, as, for instance, with surgeon-chiropodists and medical herbalists. Looking at the many difficulties, of which these are samples, considering the apparent impossibility of doing away with quackery by any amount of legislation, and bearing in mind also the dangerous position which the medical quack occupies under the present law—a position which, in the general practice of medicine, limits his action to comparatively small fields—it seems quite probable that no further attempt may be made to deal with this subject in future medical legislation, and it certainly appears to have been given up by many medical reformers.

Yours, &c.,

London, *March 17th*, 1888.

S.

Dentists' Licence for the Cape Colony, South Africa The Medical Board.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION"

SIR,—We owe thanks to the strenuous efforts of those gentlemen who have been instrumental in getting dental surgery recognised as an integral part of the noble art of medicine and surgery, for, since the passing of the Dentists Act of 1878, the status of dentistry has been greatly improved.

It may not be generally known that before practising as a dentist in this colony, it is first necessary to obtain permission to practise as such, and to get this the following course must be pursued.

Write to the Colonial Secretary, applying for permission to practise

as a dentist in this colony, enclosing whatever official documents (diplomas, &c.) you may legally possess.

This application is then transmitted by the Colonial Secretary to the Secretary of the Medical Board (who are the advisers of the Government in matters connected with medicine, surgery, pharmacy, &c.) for a report thereon.

If the President and Members of the Board are satisfied with the certificates (or diplomas), they then recommend the Government to grant a licence to the applicant "to practise as a dentist in the colony." In a few days after this a reply will be received by the applicant giving the necessary authority (with returned certificates), when application must be made to the Distributor of Stamps, who will issue the licence, for which £2 10s. must be paid. You are now at liberty to practise as a dentist.

THE MEDICAL BOARD.—I rejoice to say that the Members composing this body are fully alive to the necessity of only recommending such applicants as possess legal and recognised diplomas or certificates, as they know the great danger people run by going to persons who, after a few months' service (possibly as an office boy) used to assume the designation of dentist (or its synonym). The registration certificate, granted under the Dentists Act, 1878, is recognised by the Board; but they are "down" on testimonials.

Myself and many colleagues in this colony have done all we can to bring about this state of things relating to the dental profession, and I may mention that, after having attended the International Medical Congress held in London in 1881, I was so grateful and proud to find that our status was recognised (under Section 12) that I vowed to do all I could to improve our position in South Africa.

I have thought by writing the above, it would save a great deal of trouble and anxiety to any person who came out here and wanted to practise; for unless the Government licence was first obtained, I should consider it my duty to the profession and the public to get the authorities to prosecute any person who sets up practice as a dentist. My colleagues are of the same opinion. Within the last few months an application to practise as a dentist was refused, simply because "testimonials" are not recognised.

Yours, &c.,

Cape Town.

BECKET HUTCHINSON.

The Post-Graduate Course.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—The excellent idea announced in the Journal for March is worthy of the consideration of all whose professional education date from an earlier decade; as the exigency of a hurried life exclude opportunity of keeping *au fait* with the rapid march of dental science; although much assistance has been rendered by the valuable papers

and excellent clinics brought before the Association at its annual meetings, yet there is an evident want which the post graduate scheme would supply if its development in all the details are of a practical character. So far as the subjects under consideration are concerned, there is not a word of objection, and, doubtless, the same may be said of the demonstrators ; but to my mind where impracticability is so manifest is by arranging lectures and clinics each day for a fortnight, and at such a time as 2.30 p.m. I know not what will be the daily duration, or whether it is expected that practitioners should sacrifice the luncheon and return to their chairs with the mind expanded at the expense of the body ; this plan might possibly answer for one day, but at the end of fifteen days the corpus would be so attenuated, that the knowledge gained would be worse than useless, and I think patients would prefer an operation performed by a well-filled corporeal presence, with a few imperfections, than by a hungry operator, even though his mind were ablaze with recent technical instruction. If such is not the intention of the gentlemen responsible for this arrangement, I would like to ask how otherwise it is possible for a busy practitioner to sacrifice this important hour of the day ; it would be difficult for one living within a mile of the precincts of the hospital, impracticable for a City man, and utterly impossible for a provincial. I would, therefore, suggest that the present scheme be abandoned, or supplemented by one having demonstrations in the evening, say once a week ; with this arrangement there would be a chance of success, but for the original scheme I predict failure in reaching those for whom it is intended.

Faithfully yours,

CHARLES WEST.

19, insbury Square, E.C.

APPOINTMENTS.

HENRY C. CARTER, L.D.S.I., has been appointed Honorary Dental Surgeon to the " Marie Stuart Home," Paddington, W.

GEORGE G. CAMPION, L.D.S.Eng., has been appointed Lecturer on Dental Surgery at the Owens College, Manchester, *vice* Leonard Matheson, L.D.S.Eng., resigned.

NOTE.—ANONYMOUS letters directed to the Secretary of the Association cannot receive attention.

P.O. Orders must be accompanied by Letters of Advice.

Communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

Subscriptions to the Treasurer, 40, Leicester Square.

All Contributions intended for publication in the Journal must be written on one side of the paper only. The latest date for receiving contributions for the current number is the 5th of the month.

Members are reminded that their subscriptions are due in JANUARY, and are requested either to remit them direct to the Treasurer, at 40, Leicester Square, or if more convenient, to pay them through their bankers, or through the agency of one of the Dental Depots, and so save unnecessary postage, &c., in applying for the same.

SPECIAL NOTICE.—All communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

THE JOURNAL
OF THE
BRITISH DENTAL ASSOCIATION
A
MONTHLY REVIEW OF DENTAL SURGERY.

No. 5.

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VOL. IX.

Dental Surgery at General Hospitals.

IN a recent number of the *British Medical Journal* there is a paper by Mr. Newland Pedley, in which he details the efforts which he, in conjunction with his colleagues, has been making in order to render the dental department in Guy's Hospital more truly representative of the present aspects of dental surgery than the dental departments of our general hospitals are apt to be. It is well known that it has been the custom to do little besides extraction for those availing themselves of the dental out-patient rooms of general hospitals, this arising not so much from any want of recognition that this was but an imperfect and unsatisfactory state of things, but more from the feeling that it was utterly impossible to give the time, material and physical labour requisite to do otherwise; moreover the class of

person seeking relief is usually such that conservative effort would meet with but scant encouragement from the patient themselves.

The question presents itself in two aspects, namely, that of the bestowal of the benefits of a great charity, and that of the development of a field for teaching ; and these two aspects admit of being considered and discussed quite apart from one another. Mr. Pedley has, we think, very wisely contented himself with the teaching side of the question which is a matter of very much more manageable dimensions than the other. As he very properly points out, if the general medical student is to form his ideas of dentistry from what he sees at his hospital, it is desirable that he should have some opportunity of seeing something of the capabilities when placed under more favourable surroundings than those of the crowded out-patient room, and this can only be done by presenting, so to speak, a sample of what can be done when time and expense are in some degree eliminated from the consideration of the operation. The enormous frequency with which dental operations are called for, and the very large expenditure of time attendant upon their proper performance, render it quite out of the question for any limited staff to attempt the treatment of the mass of patients presenting themselves, and so, for the moment, he has addressed himself mainly to the endeavour to operate upon a few cases for the purpose of demonstration, and to treat these with the care which would be bestowed upon them in private practice. In this way the general student will gain a better idea of how the time of the dentist is spent in the course of his everyday work ; and if this were done more widely it could be productive of nothing but unmixed good to the dentist, who would then meet with a more intelligent co-operation from the general body of the medical profession than he does at present. It is no uncommon

mon occurrence for the dentist to have a patient sent to him by a medical friend with some message which shews the sender to be but superficially acquainted with dental disease, and this often places the dentist in a position of delicacy and difficulty in doing his best for the patient, without appearing to be exalting his own judgment to the discrediting of that of the sender of the patient. For example, it seldom is fully apparent to any other than the dentist that an irritation which has been, rightly perhaps, attributed to a tooth, will, when it is due to an inflamed nerve, be efficiently removed by the devitalisation of that nerve, which will alter all the conditions under which the irritation had arisen; whereas, if the mischief be in relation with a dead tooth, it may be able to be cured without the extraction of that tooth, though, if its possible consequences be serious, it will probably be wise to condemn the tooth at once. An amusing instance of the dogmatism with which some of our medical *confrères* approach such questions will be fresh in the memory of those who attended the last meeting of the Odontological Society, where we were, it appeared by the utterances of one of the speakers, expected to yield an unquestioning obedience to his behests; it may be that he was unfortunate in his use of words, but the impression left after listening to his speech was that to him a tooth was a tooth, that it had but one disease, and that extraction was the only treatment worth speaking of.

Had this gentleman attended the practice of a dental hospital for ever so short a time, or the practice of a dental department in general hospital such as Mr. Pedley shadows forth, we venture to think that he would have spoken with less dogmatism and have carried more weight.

How far Mr. Pedley is right in the belief that the multiplication of complete schools of dental surgery can with advantage be attempted is a wide question; for our own

part, opposed as we are to the multiplication of special hospitals, it nevertheless appears unlikely that any general hospital will care to devote to its dental department the amount of accommodation, of money and of importance which will enable it to compete on favourable terms with a well-organised special hospital, and the student would be advised who elected to learn his special work, for to be present at all events, at any other than a special school.

The Ornithorhynchus.

IN a note communicated to the Royal Society in February, which we publish elsewhere, an account is given of the occurrence of true teeth in a young Ornithorhynchus. They were discovered by Mr. Poulton in some sections belonging to Dr. Parker, which had been prepared for the purpose of morphological study, and they are of great interest, both as examples of rudimentary teeth, and having an important bearing upon the larger question of mammalian evolution.

It will be remembered that the adult Ornithorhynchus has its flattened jaws armed with horny plates, which fulfil the function of teeth, and the teeth germs which have been described in the paper referred to are situated beneath these horny plates, in this respect recalling the occurrence of rudimentary teeth beneath the horny plates which partly cover the gums in the Dugong and the extinct Rhytina.

Three teeth are described as occurring on each side of both upper and lower jaws, and the tooth germs, somewhat imperfectly figured in this preliminary note, appear to have the ordinary characters of mammalian tooth germs, save in some respects to which attention may, perhaps, hereafter be called.

The teeth are described as having on the outer side three long cusps, and on the inner side some very short cusps; in the opposite jaw this arrangement is reversed, some calcification has taken place on the summit of the lower cusps, but none elsewhere.

The author promises to pursue the subject, and we may hope for fuller and better illustrations; moreover, there are indications in this preliminary note that the author, who is well known as an investigator in other departments of morphology, has no great familiarity with sections of tooth germs, so that it would be premature to build too much upon the material as yet published.

The base of the germ is much constricted, as though it had either completed its growth in respect of its length, in which case it would be a very short crown indeed, or else as though the tooth were to have an expanded crown and a much smaller root, therein not resembling most mammalian teeth; moreover, while the longer cusp is represented in the tooth germ by the usual very sharp tipped dentine papilla, the shorter cusp so-called is represented by a round topped eminence upon the dentine papilla; this is not usual, for a cusp is generally, as far as the dentine is concerned, quite sharp, and the rounding is accomplished by means of the differing thickness of the enamel.

It seems possible, therefore, that the writer has laid undue stress upon the multicuspidate character of the teeth; but, as has already been said, it is premature to discuss this in the absence of more numerous and more detailed drawings.

The Ornithorhynchus and Echidna have long attracted the interest of anatomists on account of the many points of resemblance which they, unlike all other mammalia, present to the Sauropsida and especially to the lizards, and this resemblance has been carried further by the dis-

covery of Mr. Caldwell that the *Ornithorhynchus* lays eggs. The teeth described by Mr. Poulton had, however, to appearances, tolerably broad-topped crowns and were multicuspidate—characters which are not possessed by any known Sauropsidan teeth—and so it has been argued that the *Ornithorhynchus* shews traces of having been descended from a very ancient mammalian form with highly-elaborate teeth.

ASSOCIATION INTELLIGENCE.

Western Counties Branch.

A MEETING of the Council of this Branch was held at the Grand Hotel, Plymouth, on Saturday, April 14th, the President Mr. APPERLY, of Stroud, in the chair.

Mr. J. C. Oliver of Cardiff, Mr. Arthur Taylor of Plymouth and Mr. Edwin Goodman of Taunton, were elected Members of the Association and Branch.

Mr. F. H. Balkwill was chosen to fill the vacancy in the office of President Elect, caused by the refusal of Mr. Rogers Bate to act in that capacity, and it was decided to hold the Annual Meeting which was fixed for Friday, July 27th, at Plymouth, instead of at Tiverton, as previously arranged. Gentlemen wishing to read papers or give demonstrations will kindly communicate with the Hon. Secretary, Mr. Henry B. Mason, 3, Bedford Circus, Exeter, at as early a date as possible.

The following additional subscriptions have been received in answer to Mr. Browne-Mason's appeal on behalf of the family of the late Mr. John Marks:—

Amount already published in Journal ...	...	£168	12	0
Richard Rogers ...	...	1	1	0
E. Apperly ...	...	0	10	6
Roff King ...	...	0	10	6
L. J. Oxley ...	...	0	5	0
W. E. Harding ...	...	1	1	0
Robert H. Woodhouse ...	...	1	1	0
W. H. Nicol ...	...	0	10	6
Walter H. Fox ...	...	1	1	0

W. H. Waite	...	...	...	...	...	0	10	6
Collection at Meeting of the Southern Counties								
Branch, through J. Dennant	...	...	...	...	...	6	5	6

Irish Branch.

QUARTERLY BRANCH MEETING IN BELFAST.

ON Friday evening, the 20th instant, the first meeting in Ulster of the members of the Irish Branch of the British Dental Association was held in the Royal Hotel, Belfast, and was in every respect a decided success. At seven o'clock the following members sat down to an excellent dinner. Dr. Barnett (in the chair); Mr. John C. Clarke, L.D.S.Eng. (vice-chair); Messrs. Booth Pearsall, F.R.C.S.I., Dublin; R. Theodore Stack, M.D., Dublin; Daniel Corbett, F.R.C.S.I., Dublin; I. Jellett; W. McStay; W. H. Elwood; J. J. Andrew, L.D.S.; W. J. Bowden, D.D.S., L.D.S.I.; and J. McStay, junr., L.D.S.Eng. On the cloth being removed, on the motion of Mr. Corbett, seconded by Mr. Andrew, the chair was taken by Dr. Barnett. The Hon. Secretary (Mr. Booth Pearsall), read the minutes of the previous meeting. The chairman called on Mr. Clarke to read his paper on—

Some Experiences of Nitrous Oxide and its Prolonged Administration.

GENTLEMEN,—I think most of you will agree with me that for all operations, within the sphere of dental practice, nitrous oxide is pre-eminently the most valuable anæsthetic we possess, and still we meet with many friends who have quite given up its use, and with others who say, "I give gas, but I do not like it."

From what cause do these opinions arise? Some, I fear, at the outset have been alarmed by the peculiar appearance manifested by patients under its influence, and have discarded it altogether.

If every member of our profession would study the subject, in the same way, and with as much zeal, as he does other branches of our art, we should have a vast army of enthusiastic adherents of nitrous oxide.

I think we may safely say that, no matter what the age of the patient, whether a child of four years, or an old man of seventy-five, whether a healthy subject or one suffering from disease, with due and proper precaution, nitrous oxide may safely be used.

After an experience, extending over twenty-two years, during which I have administered in upwards of ten thousand cases, I feel more enthusiastic in its favour every day, and firmly believe with the late Mr. Clover, that as yet it is only in its infancy, and will some day become the anæsthetic *par excellence* for surgical as well as dental operations.

The person who administers, should devote his whole time to the patient, and should have nothing to do with the operation. He should watch, with as much attention, the breathing as the pulse, for in all cases it would certainly fail some seconds before the heart's action.

The removal of the face-piece and resort to artificial respiration would be successful. The patient's dress should be perfectly loose about the body, so as not to interfere with the free movement of the diaphragm. Although the bluish appearance of the face, together with the stertorous breathing and the insensibility of the conjunctiva are sure indications of anæsthesia, there are many cases where change of colour is entirely absent, and there is little or no stertor. Experience is the best guide in all cases.

The lividity is not due to venous congestion, but to want of proper oxygenation of the blood, and will disappear as soon as the patient breathes air freely. The stertor is caused by the vibration of the aryteno-epiglottidean folds, which approach each other at the base of the epiglottis, diminishing the respiratory aperture. The upper part of the passage may also be obstructed by the falling back of the tongue, and can be at once relieved by pulling the tongue forward.

Perfect silence should always be maintained, and the patient never operated upon until perfectly anæsthetised, nor should the operation be prolonged after the least sign of returning consciousness. It has been proved to be highly dangerous, a very slight shock sufficing to arrest the heart's action in incomplete anæsthesia, owing to the vagus centres which inhibit the heart's action being paralysed in an undue ratio to the vaso-motor centres. A person suffering from heart disease, thoroughly under the influence of nitrous oxide, would be much safer than if we submitted him to the shock of extracting a tooth without any anæsthetic. I think we may safely say heart-disease is no drawback to its administration. Kidney complications, hemiplegia, epilepsy, chorea, pregnancy or lactation offer no objection. Hysteria demands judgment and attention, and unless your patient be profoundly anæsth

tised, you will certainly have some very unpleasant experiences. Phthisical cases demand more care than most others, and should not, as a rule, be put as far under, the anæsthesia, usually deepening after the removal of the face-piece. Cases of aneurism and hernia need attention; under no circumstances should struggling be restrained, but the administration should be quietly continued, and such conditions will then pass quite away.

I fear I have detained you too long with details familiar to you all, forgetting that the prolonged administration of this agent is the subject of interest which I wish to advocate.

I have tried gas and ether combined, only to discard them, as often giving rise to struggling and unpleasant after-effects, such as sickness, giddiness, and headache; for which the prolongation of the anæsthesia did not, in my opinion, compensate. A friend advised a few drops of chloroform on the valve of the facepiece, stating he had obtained good results. Still there was a want of certainty about it.

Having a patient of excessively nervous temperament, almost impossible to control, I resolved to first administer a small quantity of chloroform and then adjust the facepiece and complete the anæsthesia with nitrous oxide. Her medical adviser (himself a skilled anæsthetist) being present, I mentioned my idea to him, in which he fully concurred. The effect was all that could be desired, and after the extraction of seven or eight teeth and roots the mouth was cleared as well as possible of blood, the administration continued and six more removed, the same being repeated until the whole twenty-six teeth and roots were removed. The patient rapidly recovered consciousness, the whole operation having lasted about fifteen minutes, during which time perfect anæsthesia prevailed. The thought flashed upon me that this would not be an isolated case, but only the glimpse of light upon a new aspect of nitrous oxide, and I resolved to continue further investigation into what promised to be a grand field of research.

Thinking the chloroform might have contributed largely to the success of my case, and having a patient whom I could only keep under the influence of nitrous oxide long enough to extract two or three teeth, I resolved to commence with the administration of a drachm of chloroform and continue with nitrous oxide as before, but in this case it only produced more excitement without prolongation of the anæsthesia.

I therefore returned to my old friend nitrous oxide, and two

days afterwards successfully administered it in a surgical operation at the Belfast Royal Hospital, keeping the patient thoroughly anæsthetised during about twelve minutes, using about fifty gallons of gas.

And now, gentlemen, I may state briefly, I have, in all, upwards of seventy-five successful cases in which patients have been kept perfectly unconscious for periods varying from four to fifteen minutes, and have been enabled to complete satisfactorily all required, whether it was the removal of a mouth full of decayed teeth and roots, or of a fractured tooth requiring the use of splitting forceps or elevator. My last two cases this week being, first, one in which I extracted six roots and punctured the antrum in a case of long standing disease; and secondly, the removal of a cartilaginous epulis about the size of a walnut, afterwards applying the cautery, the whole operation lasting about eight minutes.

I feel, gentlemen, that this short paper, written after a hard day's work, late at night and fatigued, has dealt with the subject in a manner more imperfect than it deserves. Still, if I have broken new ground for the younger members of our profession, and they take up my very imperfect experiences and continue their research, we shall, in the not far distant future, have a flood of light thrown upon a subject of great and absorbing interest to every member of our honourable profession, and, I, in common with the rest, may learn a great deal, for truly our speciality has made great strides, and will continue to do so for all time.

The CHAIRMAN said that it was a most interesting paper. Mr. Clarke's experience had been so very large that it gave his opinions much weight. He recollected that when chloroform was first introduced many members of the profession were afraid to use it. There was one case where it was resolved not to give it to the patient, and he died. If he had been chloroformed everybody would have said the chloroform had killed him. Nitrous oxide was thought to be more fatal still, and he believed some fatal cases had occurred with it.

Mr. BOWDEN said he should like to ask Mr. Clarke if it had been his practice to allow his patient to recover completely from the effects of the gas after it was first administered before administering it the second time.

Dr. STACK said he was not able to discuss that subject at length because the prolonged administration of nitrous oxide was

thing with which he was totally unfamiliar. His own very limited experience of the matter was that when the gas was administered for the first time the second administration was naturally different from the first administration. He had always himself opposed the second administration of the nitrous oxide at all, preferring, if the operation could not be performed on the first administration, to go on to ether. As regards giving nitrous oxide to children he would prefer chloroform on account of the simplicity of the apparatus with which it was given. He thought the inhaler of the apparatus frightened them a little. He certainly entirely endorsed the idea that there was nothing to fear with nitrous oxide. But if he wanted to come with credit out of an operation, for instance taking out roots, he would certainly prefer to have one of the other anæsthetics administered. In the case of a patient of his he could not forget that nitrous oxide was administered, and the result was that the patient woke up during the operation which was the very reverse of a success. That was a very grave matter to happen, but it pointed in the direction of what he had been saying. As regarded the safety of nitrous oxide he thought they would all remember the death of Dr. Harrison. Dr. Harrison insisted on having nitrous oxide. The operation was not complete the first time and he insisted on taking it again. He took it again in about ten minutes and died in it. His impression of the case was that the first administration was a success, and on getting it again the patient succumbed.

Mr. BOOTH PEARSALL said he was not an advocate for prolonged administration of nitrous oxide. He hardly ever used it in his own practice, if he wanted to do a serious or deliberate operation, such as Dr. Stack had stated. They must all remember that the cases of death that had taken place in nitrous oxide had taken place when the patient was returning to consciousness, and so far there had been no explanation given to them why death had happened; but he knew from enquiry that the more careful members of their profession preferred to have 24 hours between one administration of nitrous oxide and another. He preferred ether as an anæsthetic. They could use it with the greatest safety in a comfortable position in which they could operate in a chair. With regard to nitrous oxide, unless they could get a medical man who thoroughly knew how to give it, they might have a very uneasy time of it with the patient. They were all familiar with the fact that, in giving chloroform, they must give a

certain amount of air to dilute the effects of the chloroform. In administering ether, in his opinion, there was nothing to be done but to hold the paper cone with a napkin inside. If that was held over the patient's face in the proper way, they got a very profound anaesthesia. When ether was given the complexion increased. The patient's face, as a rule, got red as if he had taken some stimulants. They must all admit that they would occasionally meet with cases requiring deliberation in extraction. Within the ten years a good many cases had come under his notice where had a little more deliberation been used, the practitioners would have been more successful. If Mr. Clarke was perfectly satisfied that he could attain the result he aimed at, he thought there was a wonderful future for nitrous oxide. He thought there should have a medical man accustomed to giving anaesthetics present in all cases. To do the operation swiftly and well required a man to be deliberately cool as well as swift. He had always declined to give anaesthetics without any medical man being present. At the same time he always tried to choose a medical man who had specially studied the action of anaesthetics. He thought Mr. Clarke had opened up a very remarkable phase of the use of nitrous oxide gas, and he hoped that as his experience increased he would give them further information on the matter.

Mr. ANDREW asked what Mr. Clarke would do if, in a case where gas was administered he got no effect whatever. He had never had a case of that kind once.

Mr. ELWOOD said he had a similar case to Mr. Andrews' where the lady was addicted to stimulants.

Mr. CLARKE said he thought the Chairman had supported him somewhat in the case in which he mentioned that chloroform had been recommended, but the operation having been undertaken without it the patient died. That was evidently a case of cardiac disease. Regarding Mr. Bowden's question, for a very long time he was in the habit of giving gas once and twice. He had no objection to giving it more than twice in the one day. He never allowed the patient to come out of the influence. As soon as he found the slightest glimpse of returning consciousness he put the facepiece and went on. It was only by experience and long experience that they were enabled to obtain those large results. Chloroform he had used very frequently with children, but nitrous oxide gas he thought had a great advantage over chloroform inasmuch

as there were no after-effects, and they could so very speedily influence a child. Take for instance a child who was obstreperous and they wished to put that child under the influence of chloroform. Well, it might take thirty or forty seconds or two or three minutes to do so. With oxide they could put them under the influence in forty or fifty seconds. He had repeatedly used it with his own children. If one thing was necessary it was for them to be cool and deliberate. Referring to the cases of death, he should be sorry to open up that question because the three known cases that occurred he thought could be most thoroughly explained. Nitrous oxide was given daily at the dental hospitals in London, and there were very few cases where there was an account of struggling interfering with the operation. With regard to the non-effect of the gas he must candidly say that he was not a believer in it. He was inclined to think that there must have been some fault. He did not for one moment think that there was any case in which it was impossible to thoroughly influence the patient. They must be careful to see that their facepiece was air-tight and that they had a good supply of gas. He might mention one very peculiar case of a friend of his in Belfast, a healthy man, who never came under the influence of gas without inhaling at least fifty gallons.

Mr. BOWDEN then read a paper on—

The Treatment of the Six Year Molars.

THE treatment of the first permanent molars is a problem which as practitioners of dentistry we are often called upon to solve, and I introduce it as the subject of this paper in order that we may mutually compare notes upon a subject of grave and common interest. Their extreme liability to early decay is only too well proven by statistics, and this our observation in daily practice amply verifies. Reasons many and various have been assigned for this frailty of disposition. It may be explained by defective structure, the result of heredity or mal-nutrition, by perverted oral fluids, or by defective cleansing, and possibly in many instances by the combined influence of all these causes. It has been suggested by authorities, with a considerable show of reason, that a fruitful source of the mal-nutrition referred to is the pernicious practice, which obtains largely, of depriving infants of their natural food, and supplying substitutes when the germs of these teeth are being calcified. Notwithstanding this faulty character, however, their

worth as members in the human economy, both in regard to function and beauty cannot wisely be overlooked, nor can their reckless extraction be unduly deprecated. Forming as they do effectively the working power of the deciduous set, and constituting the very centre of mastication in the permanent teeth, their value as assistants in the first process of digestion may not be underestimated. In addition to this, when wisely retained they play an important part as contributors to facial contour and proper articulation.

It is a matter for great regret, and one which it rests upon us as a profession to mend to the best of our ability, that parents are, as a rule, grossly and culpably ignorant of the attention which these teeth require, labouring, as they do, under the delusion that they are temporary and will therefore be replaced. The result is that they are frequently brought to us for treatment when conservative measures are hopeless, and extraction must be resorted to as the only means of permanently allaying the acute suffering which their neglect has entailed. However, in this state of things may be due to neglected opportunities for instruction on our part I do not say, but the fact remains, with its consequences. Experience having proved that pain, contraction of the maxillary arches, and imperfect mastication with its sequelae are the result of the early loss of these teeth, our duty clearly lies in the direction of their preservation, if wisely possible. Permanently, but at least until the eruption of the twelve year second permanent molar. To do this with reasonable hope of success, we must obtain control of the patient as soon as possible after their appearance, so that should decay manifest itself it may be arrested in the early stage by excavation and the insertion of a suitable filling. It may not be out of place to mention that one of the difficulties met with in the treatment of young teeth is a sensibility of dentine so acute as almost to prohibit anything like thorough preparation of the cavity or large operations. As our patients at this age are not philosophical, the gentlest possible manipulation is necessary, cutting the cavity in dentine in a direction towards the circumference with sharp instruments, as it has been found that the pain thus inflicted is more bearable than if the excavation be made towards the pulp, while the danger of exposing that delicate organ is greatly lessened. Various remedies for this sensitive condition have been suggested and are in constant use, but I shall content myself with mentioning

which experience, both personal and otherwise, justifies me in recommending to your consideration.

The first is a solution of phenate of soda applied to the dentine, previously dried as completely as possible by absorbents, supplemented by heated air. The carbolic acid in this preparation not being very soluble in water, cannot yield quick results in the way of obtunding pain unless with almost absolute freedom from moisture.

Should it be impossible to maintain dryness for any length of time, the best results will be obtained by sealing some of the solution in the cavity with cotton and sandarach varnish, and allowing it to remain for a day or two, when, if necessary, the application may be repeated.

The second remedy is precipitated chalk applied to the gums in the buccal region in very small quantity and allowed to remain over night in the mouth. An excess is very likely to cause nausea. I have seen teeth tolerate a reasonable amount of thoroughness in preparation after a month of this alkaline treatment which had previously found even the contact of cotton intolerable. As to the choice of filling materials I agree with Dr. L. Jack, of Philadelphia, who says: "It is futile to attempt severe operations with the metals when we have, as is so often the case, the combination of low vital force with softness of structure and active exciting causes of carious action."

When poor structure and rapidly advancing decay in these teeth point to the hopelessness of their permanent retention, the most satisfactory results in my own practice have been from the use of Weston's cement in crown filling, and some form of gutta-percha in approximal cavities if small enough to afford protecting enamel edges. I refer particularly to Weston's cement, because once inserted the contact of moisture will not interfere with its setting, an advantage easily understood in these cases.

If the patient be of a favourable temperament, devitalization and extirpation of the pulp should be resorted to before the twelfth year rather than extraction with its consequent loss of masticating surface. Having procured their preservation until that time, if at all possible, judgment is called for to determine upon the question of their removal or retention. If decision in the matter be unduly deferred, and extraction resorted to at a later period, the second molar is not likely to advance squarely into the resultant space, and with the awkward forward inclination and mal-articulation as the result of this delay we are all familiar.

The desirability of extraction is, however, indicated, decay in one of these teeth has advanced to an extent which poses the pulp; experience showing that permanent preservation in these cases is not to be expected. It is also called for when a crowded state of the arch they manifest approximal threatening to involve the second bicuspid or second molar. Advantages thus secured by affording opportunity for clearance are apparent. When overcrowding shows itself by protruding canines, the state of the bicuspid should be carefully examined before resorting to the removal of the six-year molars as a means of affording space, and the evidence of a certain amount of decay in the latter should not necessarily doom them. It must be remembered that at this time the molars have been already exposed for a number of years to decaying influences, and the fact of immunity of the bicuspid does not necessarily prove them of superior structure. The position of the molars in regard to distance from the teeth requiring space must also be considered in weighing the matter, as it will materially influence the results. It has been advised by some practitioners that from the view of preventing possible trouble in the cutting of wisdom teeth the six-year molars should be extracted either before their eruption or previous to the appearance of the second molar. While there can be no doubt that in a contracted jaw the wisdom teeth will erupt more easily and last longer if space be thus afforded them, the pre-eminent value of the six-year molar, if sound, must save it from such a fate. In conclusion, when extraction is resorted to, I would suggest the removal of the whole four to secure more even alignment, and articulation of the remaining teeth thus be secured.

Dr. STACK said that the subject was one that he had spoken of before at the meeting in Cambridge in 1884, or thereabouts. He thought that the conclusions he came to there tallied very well with those brought forward by Mr. Bowden in the main. There might be some very minor differences in that paper, but he entirely endorsed his views.

Mr. CLARKE said he was exceedingly pleased that Mr. Bowden gave them this subject for his paper. It opened a new field of discussion and one on which he was very pleased to see that they did not hold such a very great difference of opinion as their predecessors did in days gone by. If their six-year old teeth had been thoroughly well treated by all means keep it in its

He had found many good results from a use of their old friend Sullivan.

Mr. CORBETT said he would like to endorse that remark of Mr. Clarke's with regard to Sullivan's cement.

Mr. ANDREW said he sometimes wondered that men had such a liking for Sullivan. He was not fond of it himself. He had been using lately Flagg's sub-marine. He did not know that Sullivan's was not a very good filling, but it was fearfully black and dirty.

Mr. McSTAY said he saw a stopping of it that had lasted for twenty-eight years and it was quite dry when it came out.

Mr. BOOTH PEARSALL said they could do nothing else but congratulate Mr. Bowden on his paper that night. He thought that every dentist of any experience would endorse the desirability of retaining the molars. They all experienced the difficulties that Mr. Bowden remarked, about nervous troublesome children. He believed Sullivan deserved their warmest support still. He had seen fillings of it that lasted for fifty-three years. He had seen a great many cases of that filling and they had certainly lasted over thirty-five years. Lately he had tried this sub-marine amalgam made by Dr. Flagg, and he liked it wonderfully well. If Dr. Flagg maintained its standard qualities so that they would always be able to rely on it he thought there was a great future for his amalgams. He hoped the day would come when the British Dental Association would prepare its own amalgams and that they would be of a reliable quality. He was always advocating with parents the use of the tooth brush. He had had the opportunity of talking a few days ago with a gentleman who had spent some time in the middle of Africa, and he declared that all the natives clean their teeth after every meal with a tooth brush, or a fibrous root that served as a tooth brush.

Mr. ANDREW said Stanley mentioned the same thing in one of his books.

Mr. BOWDEN said he had to thank them for the way in which they received his paper. In reference to Sullivan's filling he had himself seen one that did for fifty years. He might also refer to the matter of cleanly habits which Mr. Pearsall had already suggested. A gentleman with whom he was acquainted and who had been spending the last four years amongst cow-boys in Western America, in speaking of them, said although they might

not wash their faces once a week, yet they all carried a brush and washed their teeth after every meal.

Mr. BOOTH PEARSALL next read a paper on—

Working Hours and Professional Health.

ON occasions like the present when members of the same profession meet in conference to promote the best interest of life work, the subjects chosen for discussion naturally range a great variety of topics, and I must ask you to assist me in cultivating a healthy public opinion on the trying nature of our duties, and how best they can be discharged with advantage to patients and with the least fatigue and injury in health to selves. The relation between the hours of work and the condition of professional health is perhaps at first sight not intimate, but it will be well for us to consider how far we have the lives of other practitioners happy or miserable by the customs or habits we adopt with respect to the length of time we devote to the daily needs of our patients. In the first place let us divide ourselves, and we can at once divide dentists into two classes: the ready and the unready, the punctual and the unpunctual, the orderly and the slovenly, without much reference to the quality of *talent*. It will at once be conceded that the orderly and punctual man has a great advantage in the race of life, as he is never flurried, nervous, or out of temper, and by his care in being always up to time (when he has the arrangement of matters), he has definite hours passes his life in useful and honourable labour, he wins the respect, and sometimes, let us hope, the friendship of his patients. You can tell at a glance when you are consulted by a patient who has had the advantage and privilege of professional dealings with such a dentist as I have lightly sketched. His convenience is usually studied, the consultation is brief, precise, and courteous. Should your time be unoccupied the patient is introduced into the routine of previous experiences, and laying aside his business, he is seated and ready for the exercise of your skill and attention in a few moments, at once falling into a comfortable position that enables you to accurately observe what is amiss. Should it be necessary to make appointments for further sittings, you can trust your life that such a patient will be at your house within the stroke of the clock at the time agreed upon and entered into your appointment book. On the other hand let us consider the position of the unready and unpunctual practitioner—what a social

perpetuated year after year by the wilful, unreasonable, unpunctual, and untruthful methods of work carried on by men who, for want of conscience in keeping their solemn engagements with others, or from pure thoughtlessness and *cussedness* teach their patients to become troublesome and unremunerative to the members of our profession. In using the term unremunerative I mean in the time the exact and punctual practitioner has to waste in waiting for the patient badly taught by a careless practitioner, or the infinite worry and annoyance he is subjected to by the silly and thoughtless messages conveyed to him in his hard work, through his servant, that "Mr. so and so must catch a train," "that Mrs. — must keep another engagement;" and "that Miss Trifler wants to go to an afternoon tea." I need not remind my hearers of the stock excuses they are all familiar with, and which are to a large extent based on fiction, for most of these hasty, hurried people fall contentedly into your chair for half an hour or more if you can spare the time for them, the moment they ask for it.

As we examine these contrasting statements of what must be, I am convinced, a daily experience with many, we are immediately struck with the convenience and comfort of one way of working as compared with the discomfort and worry of the other; and if we think a little longer on the matter we shall wonder why some definite routine of dental practice has not been adopted by our profession with respect to our hours for work and the opportunities we ought to be able to count upon for obtaining proper rest, recreation, and exercise, so as to enable us to conscientiously discharge our responsibilities to the public without undue loss of life on our own part. We seldom look over any of the Journals devoted to the interests of our profession without noticing from time to time the ravages death makes in our ranks; and while we see the name of a veteran now and then who has fallen in life's battles, we more frequently see the death of men of great talent and promise, at ages ranging from mere adolescence to a few years short of the prime of life. In the obituaries of the more remarkable men who fall in our ranks ere the battle is won, how often do we see that death was unconnected with any organic disease, so that it is quite certain that a man should be of a very strong constitution who would hope to reach the three score years and ten, in practice as a dentist. I can remember some sad instances in the history of our profession of men of mark thus cut off in

the flower of their youth, and I have come to the conclusion it behoves us as a profession to take steps in the direction of pressing most of the avoidable and unnecessary worries resulting in loss of health and temper with which we are all so painfully familiar. From enquiries I have made I find that the hours of work used by members of our profession vary a good deal, in sequence, no doubt, of the idiosyncracies and nervous force of each individual. Some begin the day early, and late take others begin their day late and end late; some again work here all the year round, and others cannot go on in harness with periodic intervals of rest from professional labour in each year. Some again only take a brief respite from work, and rush impatiently to the bread winning with the keenest zest. Put aside these instances of individual peculiarity, could we not arrange such a system of working hours as would meet all ordinary circumstances of practice, and free us from the waste of time caused by unnecessary and trivial interruptions, too often a heritage from the unbusiness-like habits of unthoughtful dentists? The great problem to be solved in ordinary dental practice, seems to be to try to educate the emergency and to get cases to come at an early hour in the day, that we might devote rapid work such as dressing teeth, extractions, inspections, consultations, &c., and leave us free to go on with our definite appointments without disturbance, so that a good steady day's work carried to completion, would be the normal record instead of many hours of nervous exhaustion, our body and brain good for nothing when our labours for the day are over, so many of us know too well. Patients do not realise what it costs a man, especially a busy man to disarrange his work by missing an appointment altogether, or how an unpunctual attendance overlapping the engagement makes careful and conscientious discharge of professional duties impossible. I need not remind you of the nervous experiences caused by a harassing day; the dull brain, the painful muscles, and the listless appetite. And how are we to convince unreasonable and careless people that what is health to them is death to us?—by some friendly understanding or agreement that our consulting hours shall be for stated hours, and that we refer to ourselves all other times for making appointments; and by faithful and punctual discharge of the undertakings made so as to avoid any unnecessary loss of time to our patients.

The figure of a practitioner, now some years dead, comes

my mind, who usually gave all his patients the same appointments, ten to twelve o'clock each day, sometimes earlier. His waiting rooms were always thronged, and many patients whose time was valuable to themselves or their families spent hours in waiting for their turn to see this gentleman, often to be told the "doctor" (a title he had not the slightest right to by the way), had gone away for the evening. Now a more orderly and honest arrangement of his engagements would have freed him from all the fuss, inconvenience, and lying inherent to this want of method, and many unfortunate patients from needless distress, with the certainty that the respect due to his character as a professional gentleman would never have been sullied. This man's practice was extensive and influential, and it is only as the outcome of three or four successful discharges of engagements punctually met without having to wait for hours that his patients can be got to understand that when you *say* eleven o'clock, you *mean* eleven o'clock. It would be foolish on my part to say how long we ought to work each day, as many circumstances have to be considered, but I think the practitioner who has honestly and faithfully attended to from six to ten patients, has done a fair day's work, and amply earned whatever rest and recreation he can afford. To these hours have to be added the necessary superintendence of the work-room, careful designing of mechanical work, or appliances needed for regulating cases, and the never ending correspondence—for appointments—for information—to alter engagements, the daily record, and the ledger. So that let a man be as energetic as you will, as skilful and rapid as you will in the execution of his work, there comes a time when this strain cannot be borne; either the natural increase of practice, the result of many years of self-sacrifice and exertion must be relinquished to obtain the needful rest, or the precious treasure of health has to be misspent or wasted, the end a bad illness with a slow recovery on the last sad journey. It would be easy to supply you with apposite illustrations of the follies of practitioners and patients, but I would rather that this grave problem of life-waste were considered seriously, and that you will in discussion bring forward many points I am afraid I have left untouched, and that perhaps we may begin to-night a much-needed reform in dental practice, so that the bad habits inculcated by the careless and thoughtless practitioner shall not in the future so needlessly, so cruelly, torture the careful, the punctual and the conscientious dentist. In conclusion, I would therefore advocate,

that in all cases of broken engagements when proper notice had been given beforehand, a fee should be demanded and charged for the wasted time ; and if we all agree to place a printed notice in the waiting rooms that such would be the practice for the future, we would be relieved from an intolerable burden of worry and inconvenience, and frivolous excuses, vexations, delays, and untruths would become things of the past.

Mr. ELWOOD said he had a notice posted in his waiting room stating that he would only be seen by appointment.

Mr. MCSTAY, Junr., said he thoroughly agreed with Mr. Pearsall's remarks about working by appointment.

Mr. BOWDEN quite agreed with Mr. Pearsall's ideas, but from his experience had been that it was absolutely impossible.

Mr. ANDREW thought it would be a very good thing if all the members of the Irish Branch would put a notice in their waiting room that fees would be charged for broken appointments.

Mr. CLARKE said some people were most inconsistent. They expected to have an operation take place in an hour and a half, or a couple of hours, and then perhaps they would send a messenger with a note stating that they could not come, and giving a trifling excuse.

Mr. PEARSALL said he did not remember any discussion on this point of the kind before. For the last eight or nine years he has used printed forms for appointments with very great advantage, and he really got a very fair attendance of punctual patients. He thought that some of the dentists that had just passed on had done them a great deal of harm in the careless way in which they conducted their practice. They had no rivals, and what an amount of worry they had left to them. He quite agreed with Mr. ANDREW's suggestion, and even if they could not enforce it they might as well try it for a year or so. He thought if they deliberately set their minds to correct that abuse that it would be a very great success indeed.

Mr. ANDREW then shewed a number of lantern slides of photographs of teeth structures and microscopic sections, all of which were greatly admired, after which, Mr. Clarke exhibited in working order the Faure accumulators for the electric mallet and for dental engine. This having been criticised by the gentleman present, Mr. Clarke replied and gave a lucid explanation of the working of the machine.

A hearty vote of thanks having been passed to Dr. B.

for his kindness in presiding, a very enjoyable and successful meeting was brought to a close.

Southern Counties Branch.

THE Spring meeting of this Branch was held at the Town Hall, Brighton. The President, Alderman Rymer, J.P., of Croydon, occupied the chair, and the following amongst others were present:—Messrs. Cornelius Wheeler, Southsea; W. B. Bacon, Tunbridge Wells; J. H. Redman, Brighton; J. E. Welch, Brighton; J. H. Whatford, Eastbourne; D. W. Amooore, St. Leonards; Walter Harrison, Brighton; J. C. Foran, Eastbourne; James Rymer, Maidstone; Morgan Hughes, Croydon; S. Hoole, Thornton Heath; W. Barton, Eastbourne; T. B. Gill, Upper Norwood; B. Williams, Croydon; S. T. Silvester, Croydon; J. N. Stoner, Brighton; W. T. Trollope, Tunbridge Wells; W. R. Wood, jun., Brighton; Douglas Caush, Brighton; Arnold Dennant, Brighton; G. Cunningham, Cambridge; and J. Dennant, the hon. sec. At the meeting of the Council six new members were elected, and arrangements were made for the coming annual meeting at Southsea in June.

THE PRESIDENT, in the course of his remarks, expressed the hope that their friend, Mr. Cornelius Wheeler, would be well supported at this meeting, not only by their presence, but by their communications.

THE HON. SECRETARY referred to a communication he had received from Mr. Pearsall, the Hon. Secretary of the Irish Branch, earnestly soliciting objects of interest to the museum, which was being arranged in connection with the Annual Meeting of the Parent Association to be held in Dublin in August, and said that he would be happy to take charge of and convey to that meeting any pathological or other exhibits which the members of their branch would kindly lend. He hoped the invitation would be cordially responded to.

He then stated that an appeal had been made to their charity, by their esteemed friend, Mr. Browne-Mason, of Exeter, on behalf of the widow and family of a respected practitioner in the West of England, who had died of pneumonia after a week's illness, at a comparatively early age. The case had been warmly taken up by the clergy and medical men and others to whom the deceased

was known, and was a thoroughly deserving one. He regretted that it had become necessary to appeal to individual members of the Association, because so many of their professional friends had failed to support their Benevolent Fund. They were coming to the end of the financial year of that fund, and, in the words of Mr. Browne-Mason, it was "squeezed dry."

He trusted that this appeal would meet with a response at all hands, and he earnestly hoped that those who had hitherto stood aloof from the work of benevolence amongst them, would see it to be their pleasurable duty to contribute a small sum annually to their Benevolent Fund, which he had reason to know was being fully and wisely administered.

At the suggestion of Mr. Cornelius Wheeler the "hat was turned round" figuratively, and the collection (with one or two exceptions since) amounted to £6 5s. 6d.

Instruments, models, &c., were exhibited by Messrs. Redman, W. Harrison, Hoole, Barton, Dennant, Amoores, and Caush.

Mr. REDMAN showed for Mr. Gibbons a very ingenious instrument devised to facilitate the removal of fangs which had become hollowed out by caries, and so were liable to crushing by the action of stump forceps. The instrument was divided down the centre, and at the end was a cubical-shaped projection which fitted into a groove made for its reception in the interior wall of the stump, being held in position by a wedge-shaped bolt, which plays up and down between the blades. A hole is drilled in the stump, and a groove is then cut by rotating a wheel bur at the end of the instrument is then inserted and the bolt passed up between the blades so as to fix the projection firmly in the groove. Then with a firm steady pull the stump is removed with very little pain and scarcely any wounding of the gum.

Mr. WALTER HARRISON, Brighton, exhibited specimens of Gilbert Walker's new facing rubber. He said he could not do better than use the words of Mr. Walker, which he had sent him in the cases:—"In introducing the rubber to the notice of the meeting, I will ask you first to specially mention that it is of a *facing*, indeed only our old friends pink, white and red combined in fine but distinct particles. I do not look upon it as perfect (like good continuous gum work), but only a great advance upon the usual pink facing, and the least discernible rubber I have ever seen, being in favourable circumstances quite unobtrusive and all scarcely noticeable.

"Its advantages to my mind are, (1) that it is as easily worked as the usual pink, and by any assistant without special training, as with continuous gum process. (2) It is a solid facing and may be cut and replenished at will, not requiring special care or solarization, the specimens sent being finished off in the usual manner. (3) Teeth may be set in irregular positions and small spaces between them, the rubber will not be offensively prominent between them. (4) It can be prepared in several tints to suit particular cases."

He (Mr. W. Harrison) could only add that seeing the specimens lent by Mr. Gilbert Walker, one could fully realize the marked advance upon the usual pink rubbers.

Owing to the gaslight, it was a little difficult to decide as to the shades exhibited, but a very favourable impression of their value was produced.

Mr. BARTON, Eastbourne, showed the models of the mouth of a boy, seventeen years of age, whose father is the subject of locomotor ataxy, due to acquired syphilis. Both upper and lower jaws are well developed, but the teeth do not articulate in front by more than one-eighth of an inch; the bite being normal from the first bicuspid backwards. There is no undue prominence or anything to indicate thumb-sucking. The four inferior incisors present the crescentic notch peculiar to syphilis, as also do the two superior centrals.

Mr. D. E. CAUSH, exhibited models of a case showing great deficiency in the second dentition. The patient, J. R., aged twenty-one, shows in the upper, absence of right lateral incisor and all the bicuspid, while the right temporary lateral and canine are present, the permanent molars are close to the molars on each side, whilst the bite is quite free in the lower. The right temporary canine remains with the permanent canine behind, on the left side there is absence of all teeth behind the canine; none of the permanent teeth have been removed. As far as could be ascertained there is no syphilitic disease.

In reply to a question as to whether there was anything abnormal in the growth of hair in this case, Mr. Caush said he particularly noticed there was not.

Mr. CORNELIUS WHEELER introduced the subject of cocaine for discussion, and stated with what pleasure and success it had been used in his practice, and he urged its use in separating teeth before stopping.

The discussion which ensued was interesting and practical. It was felt that much more had yet to be learned, both as to the proper method of administration and its toxic effects. CHAIRMAN thought its use was contra-indicated for external use when there was much inflammation. Half-a-grain was considered a sufficient quantity of the hydro-chlorate to use for a single dose. Traction by Mr. Wheeler and those who have had experience with it.

A vote of thanks to the chairman, and to those gentlemen who had given communications, terminated the proceedings.

The Annual Meeting of this branch will be held on Saturday June 23rd, at Southsea.

One pleasurable event in the course of the day's proceedings will probably be a steamboat excursion.

The hon. sec. will be glad to receive promises of interesting communications at an early date, so that a full programme may be issued in next month's Journal.

Midland Branch.

THE Annual Meeting of this Branch will be held on Monday May 18th, at the Institute of Science and Art, Clifford Street, York, under the presidency of T. E. KING, Esq., L.D.S.

On Thursday evening preceding the meeting, Walter G. KING, L.D.S., will hold a reception at his house, 4, St. Leonard's Street, from 9 to 11. Papers are promised by F. H. Weekes, F.R.C.S., on "Anæsthetics," by T. M. Nicol, L.D.S., on "Dental Education," and by F. Harrison, M.R.C.S., on "Cases in Practice." H. B. KING, L.D.S., will introduce for discussion the question, "On what basis shall dental services be rendered in public elementary schools?" Demonstrations will also be given by Dr. St. George L. KING, M. Johnson, L.D.S., G. G. Campion, L.D.S., and G. B. KING. T. E. King, President-elect, very kindly invites the members to lunch with him.

The Dean of York has very kindly promised to receive the members and friends over the Minster on Saturday morning, and other interesting features of the city and neighbourhood will be accessible.

Sir Joseph Terry & Sons will be pleased to allow the members

and their friends to inspect their works at 9 a.m. on Saturday morning.

The Annual Dinner will be held at the Station Hotel, on Friday evening ; tickets (without wine) 7s. 6d. each.

W. H. WAITE, *Hon. Sec.*

Oxford Street, Liverpool.

Eastern Counties Branch.

THE Annual Meeting of the above Branch will be held at the General Infirmary, Northampton, on Wednesday, June 27th. Members willing to contribute papers, or who have anything else of interest to bring forward, will oblige by communicating as soon as possible with the Hon. Sec.,

W. A. RHODES.

53, Trumpington Street, Cambridge.

The Annual General Meeting.

The Eighth Annual Meeting will be held at Dublin, on August 23rd, 24th, and 25th, 1888.

List of Hotels and Lodgings at which Visitors can be accommodated.

Members desiring accommodation are requested to apply direct to the landlord of a hotel or lodging-house, or to W. BOOTH-PEARSALL, F.R.C.S.I., 13, Upper Merrion Street, Dublin.

HOTELS.—"Gresham Hotel," Sackville Street, 6s., or full board, 10s. ; "Morrison's Hotel," Dawson Street, bed, breakfast, and attendance, 6s. ; "Hibernian Hotel," Dawson Street, bed, breakfast, and attendance, 6s. ; "Maple's Hotel," Kildare Street, bed, breakfast, and attendance, 6s. ; "Buswell's Hotel," Molesworth Street, bed, breakfast, and attendance, 6s. ; "Tarpey's Hotel," Nassau Street, bed, breakfast, and attendance, 6s. ; "The Hammam Hotel," Sackville Street, bed, breakfast, and attendance, 5s. 6d. ; "Martin's Hotel," Baggot Street, Lower, bed, breakfast, and attendance, 5s. 6d. ; "Jury's Hotel," College Green, bed, breakfast, and attendance, 6s. ; "Grosvenor Hotel," Westland Row, bed, breakfast, and attendance, 6s. ; "Campbell's Hotel," Molesworth Street, bed, breakfast, and attendance, 5s. 6d. ; "Mackin's Hotel," Dawson Street, bed, breakfast, 6s. (bachelor's hotel), "Central Hotel," City Markets.

TEMPERANCE HOTELS.—"Russell's," St. Stephen's Green, bed, breakfast, and attendance, 5s. 6d. ; "Edinburgh," Sackville Street, bed, breakfast, and attendance, 5s. 6d. ; "Aitkin's," Westmoreland Street, bed, breakfast, and attendance, 5s.

The above hotels are all well within a mile of Trinity College, and many of them within a quarter-mile.

HOTEL OUTSIDE TOWN, but within easy reach by train, three times a hour.

KINGSTOWN, "Royal Marine Hotel," bed, breakfast, and attendance, 7s. 6d. and 9s.

The following houses will take members at 5s. 6d. for bed and breakfast.

LOWER LEESON STREET.—Nos. 1 & 2, Mrs. Bolton; 78, Mrs. Moore; 96, Mrs. Poole; 97, Mrs. Elwood.

LOWER BAGGOT STREET.—Nos. 54, Mrs. Ferral; 95, Mrs. Hayde; 97, Mrs. Brewster; 103 & 104, Mrs. Williams; 113, Mrs. Gamble; 114, Mrs. Stone; 116, Miss Campling; 117, Mrs. Gardiner, bed, breakfast, and attendance, 7s.; 122, Mrs. Guy, bed, breakfast, and attendance, 6s.

UPPER BAGGOT STREET, No. 31, Mrs. Baston.

Sitting rooms can be had in many of the above houses.

LOWER MOUNT STREET.—Nos. 19 & 20, Mrs. Borthistle, bed, breakfast, and attendance, 4s. 6d.; 21, 22 & 23, Mrs. Brock, bed, breakfast, and attendance, 4s. 6d.; 57, Mrs. Moore, bed, breakfast, and attendance, 5s.; 70, Mrs. Morris, bed, breakfast, and attendance, 5s.; 71, Miss Hale, bed, breakfast, and attendance, 5s.; 73, Mrs. Madden, bed, breakfast, and attendance, 4s.

SOUTH FREDERICK STREET.—No. 15, Mrs. Longston, bed, breakfast, and attendance, 5s. 6d.; 29, Mrs. Wilson, bed, breakfast, and attendance, 5s.

Sitting rooms can be had in many of the above houses.

HOLLES STREET.—No. 3, Mrs. Ryan, bed and breakfast, 4s. 6d.; 35, Mrs. Gilbert, bed and breakfast, 4s. 6d. each; 36, Mrs. Keogh, sitting room and 2 bedrooms, £2 2s., bed and breakfast, 4s. 6d.

CLARE STREET, No. 14, Mrs. Tuke, sitting room and 2 bedrooms, £2 2s. per week, bed and breakfast, 5s. 6d. per day.

NASSAU STREET, No. 17, Mrs. Sidford, sitting room and 2 bedrooms, £2 5s. per week; bed and breakfast, 5s. per day.

UPPER LEESON STREET, No. 16, Mrs. Darling, bed and breakfast, 5s. per day.

NORTH FREDERICK STREET.—No. 13, Mrs. Keogh, bed and breakfast, 5s. 6d.; 15, Miss O'Reilly, bed and breakfast, 5s.; 18, Mrs. Kennedy, 34, Mrs. Winter, 5s.

GARDINER'S PLACE, Nos. 10 & 11, Mrs. Montgomery, boarding house, bed and breakfast, 5s. per day, full board, 8s.

GARDINER'S STREET, UPPER.—No. 5, Miss Philan, sitting room and 2 bedrooms, £1 10s. per week, extra bedroom, 10s. per week; 8, Mrs. Conarchy, sitting room and bedroom, £1 5s. per week, extra bedrooms, 8s. and 9s. per week.

The Annual Museum.

THE Annual Museum of the British Dental Association was held on 23rd, 24th, and 25th August, 1888, in the Anatomy Hall of the School of Physic, Trinity College, Dublin. Floor 108 by 30 feet; top and side lights.

Section I.—Manufactures. Dental Instruments and Apparatus exhibited by manufacturing firms or agents. Artificial Teeth

Electrical or Water Motors, and Appliances for Dental Engines. Precious Metals and their Preparations or Alloys. Drugs, Lamps, Chemicals, &c.

Section II.—Literature. Journals, Monographs. Handbooks on Dental Surgery, Physiology, Mechanics, Metallurgy, or Materia Medica.

Section III.—Surgical. Pathological preparations of Diseases of the Teeth and Jaws. Casts of Injuries and Deformities of the Jaws. Regulation cases. Casts showing results of Treatment. Appliances used in the Treatment of Irregular Teeth. Casts of cases of Cleft Palate, with examples of Obturators and Artificial Vela. Specimens of Abnormal Teeth. Interdental and other Splints, with Casts of cases treated for Fracture of the Jaws. Photographs of cases. Micro-photographs.

Section IV.—Workroom. Tools. Appliances or Instruments for use in Surgery or Workroom, made or invented by Dentists, Members of the British Dental Association. A catalogue will be published.

THE MUSEUM COMMITTEE.

Sections—I., Manufacture; II., Literature; III., Surgery.—*Chairman*, Robert H. Moore, F.R.C.S.I., Dublin; *Vice-Chairman*, John C. Clarke, L.D.S., Eng., Belfast; *Hon. Sec.*, A. W. W. Baker, M.D., Dublin.

IV. Workroom.—*Chairman*, A. F. Thomson, Dublin; *Hon. Sec.*, G. M. P. Murray, L.R.C.S.I., Dublin.

The Local Committee is not yet completely formed. The following members of the British Dental Association have consented to act with the Local Committee.

Midland Counties Branch.—H. Blandy, Nottingham; G. G. Campion, Manchester; J. Renshaw, Rochdale; W. H. Waite, Liverpool; Sidney Wormald, Stockport.

Western Counties Branch.—W. A. Hunt, Yeovil; J. T. Browne-Mason, Exeter; G. C. McAdam, Hereford; Richard Rogers, Cheltenham.

Eastern Counties Branch.—J. Fenn Cole, Ipswich; George Cunningham, Cambridge; Amos Kirby, Bedford.

Scottish Branch.—John Smith, Edinburgh; W. Campbell, Dundee; W. H. Williamson, Aberdeen; Andrew Wilson, Edinburgh; M. Finlayson, Edinburgh.

West of Scotland Branch.—J. Brownlie, Glasgow; James Cumming, Glasgow.

Southern Counties Branch.—J. Dennant, Brighton; J. H. V. ford, Eastbourne.

Irish Branch.—W. C. Corbett, Cork; Daniel Corbett, Dublin; W. H. Elwood, Belfast; W. Booth-Pearsall, Du Samuel Smyth, Londonderry; A. J. Watts, Dublin.

MEMBERS UNCONNECTED WITH BRANCHES.

Warwick Hele, Carlisle; David Hepburn, London; W Coffin, London; J. H. Mummery, London; Sir Edwin Sau London; H. E. Sewell, London; J. Smith Turner, London; S. Tomes, London; A. S. Underwood, London; T. Ch White, London.

HOSPITAL REPORTS AND CASES IN PRACTICE

Anæsthetics in Cases of Maxillary Ankylosis

By C. J. BOYD WALLIS, L.D.S.Eng.

MR. HEWITT'S case, recorded in the JOURNAL OF THE BR DENTAL ASSOCIATION for April, recalls to my mind an ex case of general Ankylosis with which I had to deal. I was in to remove the upper and lower incisor teeth, to facilit process of feeding the patient, who was a man of some fort years of age, and a builder by trade. His wife informed m some two or three years previous her husband was engag building a large structure in one of the suburbs of London on one occasion, whilst engaged in superintending an imp part of his work a heavy rain came on which drenched him skin, and he foolishly remained for some time on the build this condition. He returned home, and, from the chill rec he felt unwell next day: a bad cold ensued, which was follow a severe attack of rheumatic fever; on recovery, stiffening o joints of the body supervened. At the time I saw the patie body, from head to foot, was perfectly rigid, so that on raisin head the whole body was raised, as in raising a wood pla lifting one end; *the jaws were rigidly closed on a most perfect teeth*, the arms alone were moveable, and these could on raised to the lower part of the chest, but his wife informed me about six months previous he could raise his hands to his m As he lay in bed, the patient looked perfectly healthy. H been fed up to this time partly per anus and partly by suckin beef tea, &c., through his clenched teeth. His medical at

ant administered chloroform, and, owing to the firm closure of the jaws, with great difficulty I extracted the upper incisors, and the lower, and the patient *made a good recovery from the effects of the chloroform*. In a similar, though less severe case, which came under my notice chloroform was employed with like success. This case has been reported.

Dentigerous Cyst.

Reported by T. S. CARTER, Hon. Dental Surgeon Leeds General Infirmary.

ON January 24th, Miss A. E. Bray, aged twelve-and-a-half, was admitted into the Leeds Infirmary, Ward 9, with swelling of left cheek, previously believed to be sarcoma. About twelve months prior to that time the patient first began to notice that her face was swollen on the left side. She had not suffered at all, and attributed the swelling to "cold."

I saw her on January 28th, and found the left cheek much distended, and having a rounded feel and appearance, such as is given by a distended antrum or malignant disease. There was an absence of nasal or oral discharge. The temporary teeth were *in situ*, but I noticed the absence of first permanent bicuspid, second permanent bicuspid, and permanent canine; respectively three-and-a-half, two-and-a-half, and one year overdue, and therefore suspected their being the cause of the distended antrum.



Having decided upon an exploration, the patient was put under ether, and after removing temporary teeth I made an incision in the line of the normal position of the crowns of the missing teeth, and found I could readily push the scalpel through the floor of the antrum, which was quite soft and boggy.

Immediately on doing so there was a gush of dark coloured

that in all cases of broken engagements when proper notice had been given beforehand, a fee should be demanded and charged for the wasted time ; and if we all agree to place a printed notice in the waiting rooms that such would be the practice for the future, we would be relieved from an intolerable burden of worry and inconvenience, and frivolous excuses, vexations, delays, and verities would become things of the past.

Mr. ELWOOD said he had a notice posted in his waiting room stating that he would only be seen by appointment.

Mr. MCSTAY, Junr., said he thoroughly agreed with Mr. Pearsall's remarks about working by appointment.

Mr. BOWDEN quite agreed with Mr. Pearsall's ideas, but his experience had been that it was absolutely impossible.

Mr. ANDREW thought it would be a very good thing if all members of the Irish Branch would put a notice in their waiting room that fees would be charged for broken appointments.

Mr. CLARKE said some people were most inconsistent. They expected to have an operation take place in an hour and a half, or a couple of hours, and then perhaps they would send a messenger with a note stating that they could not come, and giving a trifling excuse.

Mr. PEARSALL said he did not remember any discussion on this point of the kind before. For the last eight or nine years he has used printed forms for appointments with very great advantage, and he really got a very fair attendance of punctual patients. He thought that some of the dentists that had just passed on had done them a great deal of harm in the careless way in which they conducted their practice. They had no rivals, and what an amount of worry they had left to them. He quite agreed with Mr. ANDREW's suggestion, and even if they could not enforce it they might try it for a year or so. He thought if they deliberately set their minds to correct that abuse that it would be a very great success indeed.

Mr. ANDREW then shewed a number of lantern slides of photographs of teeth structures and microscopic sections, all of which were greatly admired, after which, Mr. Clarke exhibited in working order the Faure accumulators for the electric mallet and motor for dental engine. This having been criticised by the gentleman present, Mr. Clarke replied and gave a lucid explanation of the working of the machine.

A hearty vote of thanks having been passed to Dr. Ba

for his kindness in presiding, a very enjoyable and successful meeting was brought to a close.

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enamel were seen, which might be regarded as a very large calculus, or as an odontome. For this specimen the Society was indebted to Mr. Balding.

Mr. MORTON SMALE succinctly described and demonstrated some very ingenious applications of electricity to dental purposes. Messrs. Coxeter, whose contrivances were, had introduced an efficient electric motor, an excellent light for illuminating the oral cavity, as well as a search light and electric mallet. In answer to several questions from members, Mr. Morton stated that he had employed the apparatus in question for some time and with considerable satisfaction to himself. The batteries he believed, were composed of sulphuric acid and chromic acid cells. The cost of the apparatus was about £30.

Dr. Edward Blake was then called upon to read his paper on Dental Reflexes and Trophic Changes.

The general changes induced by dental defects were classified as follows:

1. Modifications of the hæmopoietic functions.
2. Changes revealed by nervous or cerebral symptoms.
3. Septic, due to swallowing morbid materials.

Nutritional changes.—Dental lesions produce loss of appetite.

Dental dyspepsia has four common causes:—

1. The result of reflex neurosis.
2. Defective mastication of food.
3. Gastric catarrh, due to septic materials passing from the mouth into the stomach.
4. General bodily depression, from the inspired air being vitiated by buccal gases.

The teeth and the tonsils.—Neglected carious teeth induce and perpetuate diseases of the tonsils, and this may happen in several ways:—

1. Morbid material may be conveyed directly from a tooth to the tonsil.
2. The tonsillar enlargement may be the result of local irritation.
3. Certain individuals suffer from associated disease of the teeth and tonsils.
4. The enlarged tonsils re-act prejudicially upon the teeth, inducing mouth breathing.

Influence of teeth upon the lymphatic system.—Glandular enlargement follows local irritation, e.g., the absorption of morbid material from teeth or gums. Irregularity of the bowels follows.

the presence of dental lesions. Constipation or diarrhoea may arise from imperfect mastication due to dental lesions.

Neuro-cerebral group.—Various cases were cited in which bizarre symptoms could be traced to dental troubles, and the importance of a careful examination of the mouth was inculcated in all such conditions. In one patient sub-occipital pains were traced to unerupted wisdom teeth, and were cured when these were removed. A case of visual perversions was next cited. Dr. Blake then narrated the history of a patient, the victim of amblyopia, apparently dependent upon dental irritation. The teeth were seen to, and the sight underwent a great improvement.

Phlyctenular conjunctivitis was another result brought about, according to Mr. Power, by defective teeth, and was cured after their removal. The lecturer further drew attention to a case in which internal strabismus of the left eye was obviated by remedial treatment of the teeth. Epilepsy, trismus, general tetanus, infantile convulsions and superior monoplegia, amaurosis and deafness, are neuroses, not infrequently due to diseased conditions of the teeth. When the upper teeth are at fault, neuralgia of the supra and infra, orbital nerves supervenes. Ear-ache, auriculo-temporal neuralgia may follow disease in the teeth of the lower jaw.

Another instance of cerebral trouble associated with dental disease was read. The patient suffered for a length of time from severe headache and mental lassitude, and finally had to relinquish his avocation. A complete restitution to health was in his case effected by removing the upper wisdom teeth.

Under the heading of septic absorption from a diseased set of teeth, a case was described of so-called rheumatic gout, which Dr. Blake referred to defective teeth.

In another patient, scorbutic gingivitis and general myalgia, causing very considerable innutrition, were traced to the fact that the patient wore a plate over some old and putrid stumps. After each meal the gums were painted with iodized phenol, and the diseased stumps having been removed, the patient made a complete recovery. Various gouty manifestations were attributed to dental deficiency, and the paper concluded by an emphatic warning against the wilful neglect of due care being paid to the hygiene of the mouth.

The CHAIRMAN reminded the members that no prolonged discussion could take place, and begged those who desired to speak to condense their remarks.

Dr. ROBERT COOPER, a visitor, to whom the reader of the paper had referred, was invited to speak, which he did at considerable length. Dr. Cooper's remarks were to the effect that he detected the causes of various illnesses by examination of patient's mouth. He further emphasized the importance of moving teeth which had set up reflex irritation.

At the conclusion of this gentleman's speech, it was found necessary to close the discussion.

Dr. GEORGE CUNNINGHAM of Cambridge, was then called upon for his paper, entitled "A Statistical Enquiry as to the Immediate Treatment of Pulpless and Abscessed Teeth." He said among several advantages claimed for the immediate method was the saving of time it effected. Mr. Coleman, in 1882, advocated immediate treatment although not immediate root filling. When methods of immediate root filling are recognised, the one in which the nerve canals are drilled and reamed; the other in which they are not so treated. The latter plan is possibly less dangerous. Dr. Ottofy's method was described. To determine limits within which operation is permissible, Dr. Cunningham had for several years employed it universally in all classes of pulpless and abscessed teeth. The results he obtained were, he states, highly satisfactory. The method he adopted was; firstly, to ensure direct access to all the roots, employing bold excavations of crowns in the requisite direction; secondly, the use of rubber dam; thirdly, freely reaming the root canals with hand drills; fourthly, the injection of medicaments (arsenious and corrosive sublimate); fifthly, filling the roots with zinc chloride; sixthly, the crown cavity treated according to ordinary principles. The cases in which immediate root filling is applicable are classed:—First, those where the pulp is extirpated or devitalised; secondly, where apical abscess exists, indicated by fistulous openings; thirdly, when the pulp is dead but no sign of its condition exists.

Class I.—Cases tabulated under this head are those of permanent teeth, the pulps of which were devitalised in eleven cases by extirpation, or in twenty-three cases by cauterisation. Before treatment, pericementitis was present in six cases. Cauterisation determined pericementitis. Devitalizing medicaments determined subsequent inflammation in five out of nineteen cases, but this was slight. SUBSEQUENT PERICEMENTITIS occurred once out of twenty-three cases and was due to accidental perforation of

roof. Perforations : three cases occurred giving rise to symptoms. Permanent crown fillings : of thirty-four teeth so treated, permanent fillings were inserted in twenty-six. Rubber dam used in thirty-three out of thirty-four cases.

Class II.—In treating the cases no enlargement of the apical foramen or injection into the abscess sac was made. Of twenty-one cases, in five the contents of the pulp canal were dry, in twelve moist, two only being associated with pus. The fistulous opening was closed in two cases, patent in seventeen. The effect of operation upon the fistulæ was noted in seventeen cases, in fifteen they closed in from one to fourteen days, only one case was followed by cementitis. Permanent crown filling : thirteen out of twenty-one cases were immediately and permanently occluded by metallic stopping. The rubber dam was applied in eighteen cases, in only two did slight inflammation follow the operation.

Class III.—Sixty teeth are grouped under this head, but of thirty-nine cases in which the pulp canal contents were noted, they were dry in fifteen and moist in twenty-four, and of the last, eighteen were gangrenous and six associated with pus. Of the fifteen, in which the contents were dry, two were affected with pericementitis before the operation ; this, however, subsided without special treatment. No pericementitis in any case followed the operation. Of the twenty-four cases where moist contents were present, the eighteen in which no pus existed are divided into five, which were associated with previous pericementitis (all save one subsiding after the operation), and thirteen in which pericementitis did not exist before the operation, nor, except in a single instance, after.

Of the six cases in which pus was present, four had given rise to pericementitis before treatment. All save one got well after the operation. In four of the cases secondary dentine was found in the pulp cavity, associated with putrefaction and moisture or pus, pericementitis before operation. Of the sixty cases noted, fifteen were affected with pericementitis. In one case slight, in the others more acute, and of from two to three days' standing. Root-filling was performed in these cases just as in the others, with the result that immediate relief and rapid subsidence of the symptoms occurred in ten cases. In four cases this result occurred in from four to ten days. In one case the pain was more acute on the day following operation, thenceforward gradual recovery took place. In every case the inflammation, whether slight or acute, terminated by resolution. Of the forty-five teeth without

pericementitis (prior to operation), four gave rise to two showing slight, one severe pericementitis. This case, lower molar, had been filled three weeks previously, and before the filling pus was found, one root canal also contained putrid cotton wool dressing, which probably accounted for subsequent inflammation. In the other case there was perforation of the roots giving rise to irritation from the oxychloride filling. In one case an unusually large apical foramen existed, but slight trouble followed this condition.

Dr. CUNNINGHAM showed a table comparing the proportion of pericementitis as occurring in dry and moist gangrene of the pulp previous to treatment, from which it was apparent that pericementitis was present twice as frequently in the latter as in the former. From a similar table, showing the proportion of cases in which pericementitis occurred subsequent to operation, we learn, first, that the cases with dry pulp chamber contents are less liable to inflammation after operation, and secondly, that operative interference is less provocative of inflammation than leaving the tooth untreated.

Permanent crown fillings: of the sixty teeth treated, forty were filled with a permanent stopping of gold, amalgam, or once crowned. Where time was too short for this temporary stopping of phosphate, oxychloride or gutta percha was inserted. In thirty-eight cases recorded under Class III., Dr. Cunningham inserted seven gold, twenty amalgam and three crowns, or 35 per cent. of immediate permanent fillings; and this, he thought, largely assisted in bringing about the favourable results recorded. His experience with the rubber dam goes to show that this guard while always advisable, is not absolutely essential to successful treatment.

At the conclusion of the paper, the Chairman, in the name of the Society, thanked the authors of the papers and contributors of casual communications, and announced that at the ensuing meeting (June 4th) papers would be read by F. F. Burghard, M.D., on "Some cases of Epulis," and by W. Mitchell, D.D.S., "Some observations on Metal Cap Crowns."

Glasgow Dental Students' Association.

THE closing meeting of the Association was held on Monday, the 9th of April, when Dr. BROWN read a paper on Cocaine, which was listened to with great interest, and was followed by a good discussion.

Mr. JOHN BIGGS then moved a vote of thanks to Dr. Woodburn, and enlarged on the honour which he had conferred on the Society by becoming its President. In response thereto, Dr. WOODBURN delivered the following address.

I have to officially intimate that this is the last meeting for this session of the Glasgow Students' Association. All such Societies have a beginning and an ending, the former environed with the troubles of its organization, the latter its regrets at its dissolution. It must be acknowledged that we all have drawn at our meetings from the fountain of knowledge, that we are all in a condition better fitted to do the work of life which is before us by the expression of opinions on various subjects of importance in our calling. Speakers have enriched themselves by special thought and expressed utterance, and listeners have had obscurities cleared which private reading could only with great mental effort overcome.

These meetings have clearly shown that it is by the comparing of a multiplicity of thoughts that we get the precipitate of false doctrines, and are enabled to remove the clear supernascent fluid, from which we can draw the intellectual refreshing draught. This evening closes the spring for the time being, and as regret must follow privation, so, I trust, that regret will be equalled by your anxiety and zeal for the time to meet again—that in the interim of repose and healthful enjoyment, moments may be snatched for the furtherance of this Society in the way of mutual improvement; that each and all of you will take up specially one subject, and with enthusiasm seek into all its mysteries, so that when you meet again you can give to the general good in return for what you have received. You will then each, in your turn, give the maximum of good at the minimum of labour—as one might read many may listen and learn.

Now, as the President of your Society, although not the hoary-headed reverend senior, boastful of the abundance of his grains in the glass of time, yet sufficiently your elder, I beg to offer a word of parting advice. And in so doing it is with feelings of sym-

pathy—for I am like yourselves a student—and likely to re-
so. With you I have difficulties and doubts, but during
experience, I have found the more a man honestly work-
sounding the depths of his calling (although now and
obscured by developing difficulties), the more real joy,
genuine sense of doing *well* the work he is called upon to
while here will he feel. This cannot be appreciated by the
who is contented with the unconscious self-conceit of a puff-
smattering of the knowledge of his work. Therefore, ge-
men, I ask you to be students, ever students, ever seeking
greater knowledge, that you may the better perform the work
are called into being to do, so that, as years roll on, you
not reproach yourselves with the sense that your life has had
higher aim than the mere worship of mammon, the God
whose shrine the dentist, like other human votaries, yields up
required sacrifice. It is said, "as a man sows so shall he re-
this is your sowing time. He who will not in the spring time
the year, clean, dig, and plough, will find his harvest a blight,
his granaries empty. This is figurative speech, but it is
questionably unequivocal as the embodiment of an analogy;
it in your minds, imbibe it into your very nature, and in many
years you will say to *your* students, this is the mystery of suc-
we have to obey the law of Nature as closely as it can be traced
any thoughtful mind in this symbolic analogy. Rouse yourself
to the realization of this fact—and remember I am bringing you
round from the vantage ground of years and experience.
Cardinal Wolsey who had sounded depths and shoals of life
you as the young and inexperienced, or Cromwell of the
torical play—that your present effort of study is not to
merely to secure a passable appearance before a board of ex-
aminers, to obtain a right to *call* yourselves dentists, and
stultify your efforts to secure the conditions that will enable
to *act* as dentists. If your object of study, now, is to
through an examination to secure a diploma, you are a
abject thing. If your aim is to be men, proclaiming your
well prepared for your calling, then you are unconscious
taining both as regards success at an examining board, and
among the ranks of your fellow-men in the general work of life

MINOR NOTICES AND CRITICAL ABSTRACTS.

**The Teeth in the young Ornithorhynchus
Paradoxus.**

By EDWARD B. POULTON M.A., F.L.S., of Jesus and Keble
Colleges, Oxford.

[Communicated by W. K. PARKER, F.R.S. Received Jan. 26, 1888.]

(From Proceedings of the Royal Society, Feb.)

FOR the purpose of continuing some recent work upon various epidermic structures in Ornithorhynchus, Dr. Parker very kindly placed his most valuable material at my disposal. Among other things was a series of consecutive vertical transverse sections through the head of a young individual, about 8·3 decimetres long, when in the curled-up attitude in which it had been received, and which was fixed by the spirit. In this specimen only the larger hairs had appeared above the surface of the skin.

The sections had been prepared for Dr. Parker by his son, Professor W. Parker, of Cardiff, and although intended for the investigation of morphological points in connection with the development and structure of the skull, many of them were in every way adapted for minute histological investigation. Examining these sections I found that large and, apparently typical, mammalian teeth were developing in the sub-epithelial tissues on each side of the roof of the mouth. I at once communicated with Dr. Parker, telling him of the discovery, and enquiring whether he had any objection to the publication of the fact. Dr. Parker replied, and urged me to at once communicate the discovery to the Royal Society, at the same time offering me material in the most free and generous manner for the further investigation of the dental structures in Ornithorhynchus and in Echidna (if present in the latter). When it is remembered that Dr. Parker had put the sections aside for a time in consequence of the press of other work, intending soon to make use of them for the investigation of the skull, it will be seen at once that my association with this discovery is purely accidental, and that I have been treated in an extremely generous spirit.

As the lower jaw was not included in the sections, I cannot

yet state that teeth are present in it, but there is little doubt that this is the case.* Teeth were present in the upper jaw in thirty sections through the head, and of these all, except nine anterior sections, included, some part of the eye. The teeth probably represent some part of the molar series of higher mammals. Examining the sections from the front towards the back, the first tooth appeared a little behind the anterior margin of the epithelial elevation, which appears to represent the developing horny plate which in the adult is the functionally representative of true teeth. The teeth seem to follow a tolerably straight line, extending internally to the horny plate and passing considerably further backwards than the margin. Owing to imperfections in this part of some of the sections I could not determine the exact number of teeth with accuracy, but they appear to be five or six in number on each side. The most anterior of these is of a different character from the others, and is apparently separated from them by an interval which is longer than in other cases. This anterior tooth is the most developed and its apex extends so far towards the surface that it nearly touches the epithelium. It is a pointed cylindrical tooth, directed vertically downwards. The four§ or five posterior teeth are of uniform shape. Their structure, appearance in relation to the surface are shown in (Fig. 1, x. 40). The two chief cusps of each of these broad teeth arise from the side of the surface.

The structure of the enamel cap is entirely normal, except that capillaries are certainly present in the middle membrane, internal from without. The inner layer of long enamel cells is very distinct (see figure). No enamel is formed from them.

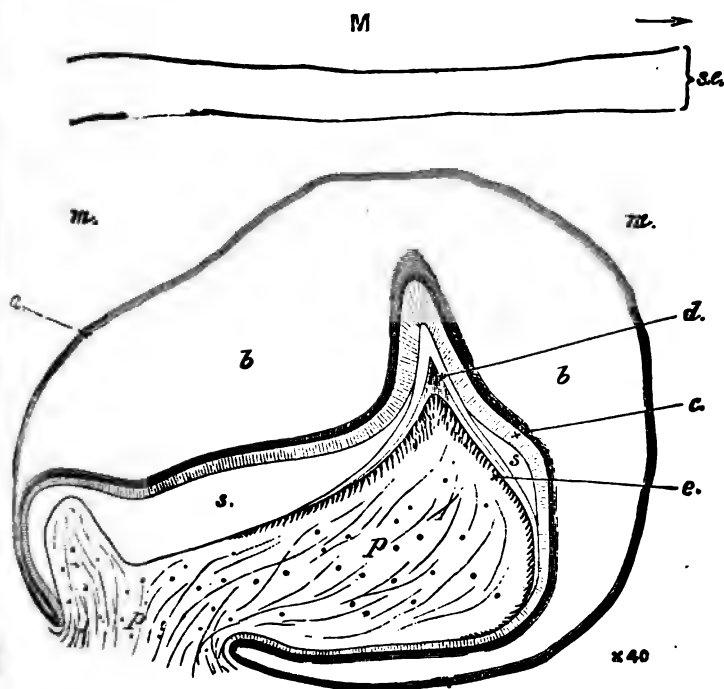
* I have since found that teeth are present in the lower jaw. Feb. 6, 1888.

† In the lower jaw the teeth appear to lie exactly beneath the developing horny plate. This may be the case in the upper jaw also, for the epithelium is in a damaged condition, and I may have been mistaken in my first identification of the undeveloped horny plate. Comparison with a skull of the same species strongly supports this conclusion. Feb. 6, 1888.

‡ I have since found that the teeth are fewer in number, probably being present on each side of each jaw. The two posterior teeth have two cusps, and the two largest of these looked like separate teeth in the lower jaw. The true shape has been shown by a dissected preparation of the lower jaw. Feb. 6, 1888.

§ In the lower jaw the two chief cusps arise from the outer side of the teeth. Feb. 6, 1888.

stage, except probably in the case of the anterior tooth.* The dentine is quite normal in appearance and formation in the posterior teeth, except that the structure due to dentinal tubules can only be made out beneath the apex, but this may be due to the condition of the specimen, or to method of preparation.† The inner part of the dentine stains faintly in carmine, and shows the striation; the outer part does not stain, and appears homogeneous. The dentine of the anterior teeth is much thicker, and is not of normal character† in its inner part, its outer part resembling that of the other teeth.



There can be no doubt that these structures are characteristic mammalian teeth, and their appearance harmonises well with the

* Recently prepared sections, made in order to decide this point, have shown that enamel is certainly present. Feb. 6, 1888.

† Recently prepared sections have shown that the dentine is of the usual structure, although in some sections it has been rendered apparently homogeneous, probably by some method of preparation. Feb. 6, 1888.

results of Hertwig's researches on the structure and development of Placoid scales. His researches indicate that the mandibular teeth are probably in a more ancestral condition than any other organ possessed by the adult. They must have been derived at one time from Prototherian ancestors, and yet existing Prototheria were not known to possess them. Their occurrence in Ornithorhynchus, therefore, supplies the step just where it is wanted. The fact that they are practically identical with the teeth of mammals is a further indication of the ancestral nature of these structures, for other higher mammalian features represented in Prototheria are profoundly modified in the latter.

Dr. Parker has very kindly placed his material at my disposal so that I propose to at once investigate, and shall shortly publish a paper upon, the nature of the teeth in the lower Ornithorhynchus and in Echidna (for it is in every way probable that they will be found in this genus also). I also intend to examine the mature organism, for it seems probable that such tooth-rudiments may be traceable in later stages. In the investigation the few points of uncertainty as to the structure of some of the tissues will, in all probability, be cleared up satisfactorily.

DESCRIPTION OF FIGURE. X 40.

The arrow points toward the middle line of the mouth.

M. Mouth.

S.E. Superficial Epithelium of oral cavity.

M. Sub-Epithelial tissue forming tooth-sac immediately outside of enamel-cap.

A. Outer membrane of enamel-cap.

B. Middle membrane of enamel-cap.

C. Inner membrane of enamel-cap; the enamel cells. The dentine just external to the enamel cells represents the stratum intermedium of Hannover.

D. The dentine of which the inner part stains faintly and contains delicate dental tubes.

S. Space caused by shrinkage between enamel cells and the outer part of the tooth rudiment.

P. Tooth papilla.

O. The odontoblasts forming the superficial layer of the papilla.

REVIEWS AND NOTICES OF BOOKS.

AIDS TO DENTAL SURGERY, BY ARTHUR S. UNDERWOOD, M.R.C.S., L.D.S.Eng., Lecturer on Dental Anatomy and Physiology, and formerly Dental Surgeon to the Dental Hospital of London. London: Baillière, Tindall & Cox.

IF an author may be appropriately discussed in a journal with which his name is intimately associated, and the writer of this notice be permitted to usurp editorial functions for the occasion, "we" shall wish to congratulate the publishers of the *Students' Aids Series* upon the latest addition to their miniature handbooks of medical science. Mr. Arthur Underwood's acquaintance with dental and general surgical literature, and his special knowledge of the student's needs, guarantee the accurate presentation of what he considers within the range of theoretical examinations; and therefore effective criticism can only be directed to the general scope and completeness of his work.

A large book is easily achieved; the making of a very small and worthy one, on any considerable subject, demands specially-directed industry, judgment, and circumspection, with the quite certain result, at the best, that fault will be found for what is omitted.

It is a most salutary experience for the busy practitioner (for we cannot all write text-books), to occasionally read straight through the condensed, lucid, and somewhat dogmatic periods of a small manual, when attracted by the name of an author who commands his respect. Judged by this test, the readable "booklet" before us, of less than a hundred small pages, produces a first impression that practical "Dental Surgery" has been left out of it altogether.

This, of course, is intentional, and avowed in a sense, but we think will not be quite frankly recognised so long as under the term "surgery" are mixed up, without stricter discrimination—1stly. Pathology, of (a) diseases, (b) injuries, (c) defects. 2ndly. Therapeutics of internal and external medication. 3dly. Principles of operative treatment, and 4thly. Details of manipulation. Mr. Underwood very properly professes to entirely omit the "purely manipulative," which "must be learnt at the operating-chair, and there alone," but he has not been courageously consistent. For while we find no mention of even the elementary principles underlying the operations of extraction, root filling, or pulp capping, and only a few sentences dismissing the whole

subject of filling, there is a pretty long, almost exhaustive description of the purely manipulative details of affixing a crown! More recent and better methods of crowning are mentioned, and oddly enough (shall we say inauspiciously) the subject of pivoting is discussed under the heading of "Compound Fractures." We feel a tendency to sacrifice even bare sufficiency of essentials of operative treatment to interesting but remote speculations in obscure points; for instance, no treatment is found suggested for alveolar abscess, which we gather is only cured by periostitis, and can only be cured by extraction.

In the summary, which might be extended or omitted, the principles to be observed in filling cavities of decay, the statement that "No metal stopping should ever be in contact with a surface capable of appreciating heat or cold," surely requires some qualification or modification of its literal sting.

Mr. Underwood, with great intrepidity, starts off with a brilliant definition of decay, in the discussion of which his well-known and invaluable researches certainly justify him in rejecting all hypothesis other than the "septic theory" as having no historic importance. But his phrase "external causes" in his definition, seems to shade off into "a phenomenon" merely by his concessions to Galippe, and the picturesquely put question whether "the tooth alone of all the living body . . . is encrusted with a sort of geological formation incapable of change?"

The discussion of transplantation and replantation under the heading "Locations" is very interesting, and the latter operation at least is evidently regarded with favour by the author, whose experience and confidence in the re-union and continued vitality of teeth and *pulps* after a momentary separation from the socket is valuable testimony. He justifies the replantation of a molar when its temporary removal may facilitate the extraction of a wisdom tooth.

Another most important contribution to the best, if not the clearest formulation, we have met with of the distinctions, so often confused, between mercurialised and syphilitic teeth. We also note the excellent accounts of scorbutic affections and of philia, for which the author acknowledges his indebtedness to "Zeimsen's Cyclopædia." As an almost solitary exception to the sound pathology which distinguishes the book, we are surprised to see its precious pages burdened by Broca's old and dis-

classification of odontomes, which, except perhaps for examination exigencies, we had thought obsolete.

The chapter on the "Casualties of Extraction" is remarkably good, and so suggestive that we suppose the author had some specially good reason for not extending it to include the accidents and emergencies attending general anæsthetics, and to which the dentist, according to our own experience, whether confronting the examiner or the stern reality (however well served by a specialist) cannot afford to be indifferent. It is also, we think, to be regretted, that when powerful internal remedies are mentioned, neither the exact dose or a distinct reference to an authority is given. The discussion, in the earlier part, of the symptoms of pulpitis, periostitis, neuralgia, &c., would be of greater use if the reader were referred at once to the most interesting and valuable last chapter on "pain" in general, and its discrimination. The book would greatly gain by a few cross references and a better index. The author is also peculiarly qualified to compile, without leading the student astray, a select list of the highest authorities up to date on important points, and his welcome announcement of a similar volume in preparation on dental anatomy may afford the opportunity.

May we infer, from the absence of a date upon the title page of this little work, that the enterprise of its publishers will enable Mr. Underwood from time to time to add from his further researches and experience to the instruction of the ever increasing body of students whose interest we know he has entirely at heart?

THE IRREGULARITIES OF THE TEETH, BY DR. TALBOT.
(Blakiston & Co., Philadelphia.)

DR. TALBOT'S work on "The Irregularities of the Teeth" is commensurate in plan and treatment with the importance of the subject. It aims at completeness and professes to embrace whatever is requisite to a clear and practical understanding of the causes and treatment of dental abnormalities. Mechanical devices for the correction of irregularity have not always followed mechanical laws, or proceeded from an accurate knowledge of the anatomical structure of the parts operated upon, or the physiological characters of the tissues affected. The writer, therefore, acts wisely in devoting the earlier part of his work, partly to descriptive anatomy and partly to the etiology of dental deformities. Of this part of the work it will suffice to say that it is up to

the standard of recent knowledge, and that the information is imparted with clearness. The writer prefaces that portion of the book which deals with methods and contrivances with a consideration of the important question of the age at which mechanical assistance can be most suitably brought into play. After certain general considerations familiar to most operators, the author arrives at the conclusion that while no arbitrary rule can be laid down, the best time for interference is between the twelfth and fourteenth year, as "general nutrition is then most advanced, the osseous system is in a constructive stage, and the formative process is in vigorous operation. At this time, also, the roots of the teeth are not fully developed, but are more or less confined within the alveoli, and the apical foramina are thus lessening the liability of impairment of the blood supply, and consequent destruction of the pulp."

A few pages on model-taking, and a chapter on mechanical forces leads on to the examination of typical cases, and an explanation of methods, many of which bear the names of dental surgeons who first devised them. It is at this part of the work that the illustrations, which are clear and numerous, are of value as material aids to the comprehension of the text. Sometimes, apart from the text, the illustrations are of use in the case of the diagram which shows some sixteen different methods of knots. The writer is an American, and most of the methods described are those introduced by his own countrymen. The methods differ very widely, not only in detail, but in principle; thus, in Patrick's system depends on the elasticity of a bow-spring of platinized gold which is anchored to selected teeth. His action is continuous, whereas in Dr. Farrar's method, known as "the Positive System," the position of a tooth is changed by a push or thrust, is retained for a time in that position, and then receives a further movement. With the system associated with the name of Dr. Coffin, English practitioners are fairly familiar, but it is here explained with clearness and some approach to completeness. The book contains some notes on retaining plates which will be found useful; indeed so far as the practical part of the subject is concerned, few points are left untouched. Although, of course, different practitioners will attach varying values to the different methods described, all will be ready to admit the value of a knowledge of each and every one of them. The "value" of the book is a credit alike to artist, publisher and printer.

NEW INVENTIONS.

Electrical Apparatus.

At the Post Graduate Course at the Dental Hospital, Leicester Square, Mr. Morton Smale shewed some apparatus made by Messrs. Coxeter and Son, consisting of an Electrical Hand Engine, a new Mallet, an Incandescent Lamp of great power, and a small Lamp for examining the mouth, all worked by a special Battery.

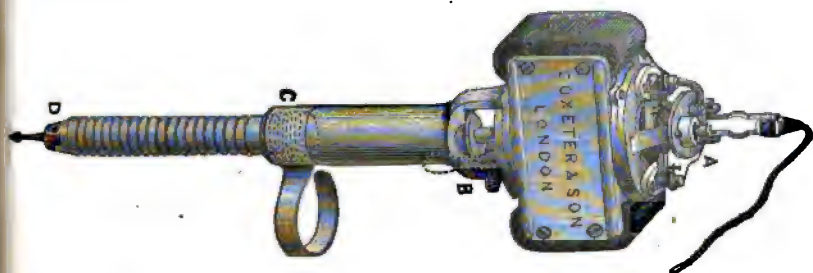


FIG. 1.

The Hand Engine is a modification of one made for Dr. G. W. Field, in 1885 (Fig. 1), which instrument is still in constant use, taking the place of the ordinary Foot Engine.

Like the electrical dental mallet, the weight is so nicely balanced that it is no obstacle to the most delicate manipulation required upon the teeth. The whole instrument being under complete control of the hand, and not subject to the weight and vacillating movement of the flexible arm, which is a very great drawback in the ordinary dental engine, it may be used with the utmost delicacy of touch in cutting the frailest tooth substance. The connection with the battery is made at **A** by the spring clamp, the burs are introduced at **D**, "which is an universal cone socket," by depressing the small lever at **B**.

The Mallet has somewhat the appearance of Bonwell's, but is much simpler in construction, gives a capital blow, and has a very wide regulation. The addition of a rotary movement for the Pluggers when desired, is a decided advantage.

The Lamp (Fig. 2) is fitted with a holder with universal movement. It is now enclosed in a screen suggested by Mr. Morton Smale, which protects both the eyes of the operator and patient. **A**

rheostat is introduced into the circuit as a safeguard for the battery, and the intensity of the light is regulated by the rotation of the milled nut and hand A.

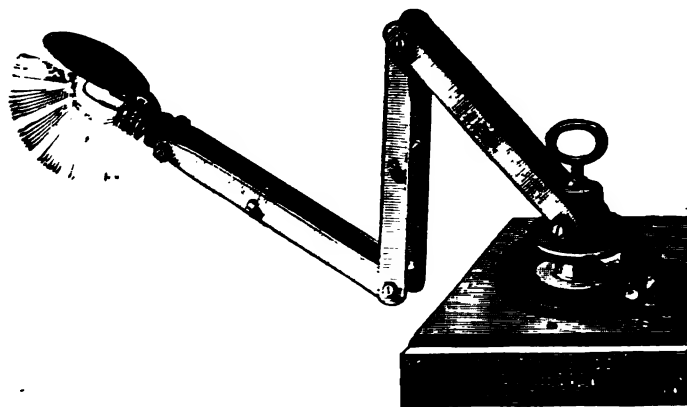


FIG. 2.

The small Lamp for examining the mouth, is shewn in Fig. 3. It has a rheostat concealed in the handle, which is cylindrical and fluted, to facilitate manipulation; the sliding button, A, regulates the intensity of the light.



FIG. 3.

It can be used either with or without the mirror. A lamp with either high or low resistance can be screwed on to the handle. With the former a more intense light can be obtained for examinations; with the latter very slight heat is produced.

The Battery shown in Fig. 4 is an improvement upon the Bunsen and Fuller type of batteries, and combines the two. It is known as the V. P. cell. The porous pot in the center is charged with dilute sulphuric acid, and contains the zinc rod, the bottom of which rests in mercury, preventing practically, all contact. The outer cell, containing the carbons, is charged with a solution, consisting largely of chromic acid. A battery of

such cells is found sufficient for engine, mallet, and for the purposes of illumination for upwards of six months without change of fluid. The zincs remain continuously in the fluid, and as the inner solution should be changed two or three times to once of the

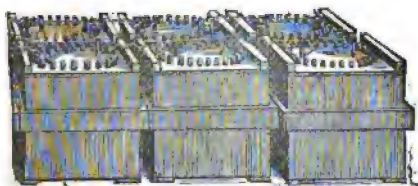


FIG. 4.

outer, the battery is very economical and durable. Mr. Morton Smale informs us that he has had nothing done to his battery since it was set up in November last, and he likes the whole arrangement very much.



FIG. 5.

The Hand Engine is generally connected with a pedal shunt (Fig. 5), but the improved instrument has also a sliding switch on



FIG. 6.

the shaft. Fig. 6 shews the switch board for turning on the number of cells required.

The apparatus was also exhibited at the meeting of the Ological Society, and commented favourably upon by those who employed the instruments and battery.

New Combination Stopcocks.

MESSRS. BARTH have recently patented an important modification of the apparatus recently employed in the administration of nitrous oxide. The essential features of the new combination stopcocks consist in combining the valves with the way stopcock, instead of having them in the face-piece. A saving of expense is hereby effective in those cases where an operator provides himself with more than one face-piece. This, however, is only one of the advantages claimed by Messrs. Barth, the others being simplicity, lightness and economy of gas.

The stopcocks are made in two forms. That shown in Fig. 1 has two movements, that is to say, when the handle is placed in the position marked A, communication with the gas bag is cut off, and air is admitted; when the handle is placed in position B the communication with the gas bag is opened, and the gas is inhaled through the inspiratory valve, and exhaled through the expiratory valve.



FIG. 1.



FIG. 2.

The stopcock shown in Fig. 2 has three movements, that is to say, besides the positions A and B corresponding to the positions A and B described above marked "Air" and "Valves," the handle may be moved to position C, marked "No Valves," in this position the valves are thrown out of the way and the gas may be breathed and re-breathed into the bag.

We have not as yet had the opportunity of practically testing the new apparatus ; it appears, however, to possess some, if not all of the merits which the patentees claim for it, and will doubtless be extensively used, if the test of experience gives sanction to the claim which seems, on first acquaintance, to be warranted.

Dr. Elliott's Right-Angle Engine Attachment.

AN important modification of the well known Hodge's right-angle attachment for the engine handpiece is being made by Messrs. Hallam and Son, from the design of Dr. St. George Elliott, which appears from a short trial to be a great improvement on anything of the kind hitherto brought out. Hodge's right-angle, like his excellent "universal chuck" straight handpiece, was the first which really steadily held and centred the point ; a split grip chuck being drawn into a coned bearing by a screw covered by a cap on a hinged lever. Unless screwed up tighter than was possible with the fingers, the vibration of the bevel pinions often loosened the grip, and the point was liable to come out on a "pulling cut." The hinged cap was also apt to become loose and pull off. Dr. Elliott abolishes the screw nut and the hinged cap altogether, substituting a very small but strong spring, which continually draws the split chuck into its coned seating. Simple pressure upon a cap which encloses the back releases the chuck from the influence of the spring, and allows the point to be withdrawn or inserted. The operation of changing a point is thus of the greatest ease and rapidity, and all loose or detachable parts are avoided. Theoretically, it would seem possible to release the point in use only by turning the engine backwards and employing a very strong "pulling cut," but in practise we have not succeeded in even doing this. If proved by use to be constructed with the accuracy and care necessary to withstand wear, the obvious simplicity and certainty of manipulation will commend this attachment as superior to any we know of.

APPOINTMENTS.

CHARLES H. SMALE, L.D.S., has been appointed Dental House Surgeon to the Victoria Dental Hospital of Manchester, vice Charles H. Buckley, L.D.S., resigned.

OBITUARY.

Mr. J. G. Whyte.

WE have to announce with regret the death of Mr. J. WHYTE, of Glasgow, which occurred at his residence, Eastwood Helensburgh, on Sunday, April 22nd. Mr. Whyte, like many members of the profession, was very skilful in the use of brush. He took to the art of painting very early in his career and had attained great excellence, especially as a flower painter. His works were frequently shewn in the local art exhibitions, more particularly in those of the Water Colour Society. Mr. Whyte was well known, and deservedly a favourite, in the West of Scotland. As a dental surgeon he did not take an active part in the Dental Reform Movement; but he was much interested in and supported the founding of the Glasgow Dental Hospital. Whyte had been in ill-health for some time, and died at the age of fifty. He was a member of the British Dental Association and of the West of Scotland Branch.

ANNOTATIONS.

THE special appeal made on behalf of the family of the Mr. Marks has been liberally responded to, and will doubtless receive further favourable answers. The necessity for such an appeal serves, however, to call attention to the condition of the Benevolent Fund, which is, for all practical purposes, for the present exhausted. This is the common fate of all such funds and must be so while human need exceeds human generosity. It is therefore in no sense a matter for reproach that the administrators of this fund are compelled to hold their hands for a moment from their pleasant work of helping those of their fortunate brethren, who, from divers causes, find it necessary to appeal to them for aid. It is, however, a happy occasion for the exercise of further liberality on the part of those who have already contributed, and for a start in the pleasant work of giving by those who hitherto, from lack of thought or opportunity, have failed to take their share in this part of the work of the Association. The former class may be relied upon, for those who have learned the luxury of doing good, are ever ready to practise the virtue

taste the pleasure anew. We trust that many who have thus far taken no share in the good work of the Benevolent Fund, will find in its present necessity their golden opportunity.

He who joy would win must share it,
Happiness was born a twin.

THE Post-graduate Course at Leicester Square is now an accomplished fact, and what is more to the purpose it has proved a decided and unmistakeable success. Notwithstanding the difficulties attaching to the hour of the demonstrations which were so reasonably pointed out by our correspondent, Mr. West, all went "merry as a marriage bell." Twenty-four gentlemen, many of whom were members of the College of Surgeons, attended the course, and expressed themselves as very much satisfied with both the quality and the quantity of the instruction offered to them. The demonstrators, one and all displayed that enthusiasm which goes so far to ensure an attentive audience, and the fact that some gentlemen continued their demonstrations for nearly three hours at a stretch, without exhausting the patience of the "post-graduates," is in itself a proof that they had hit off exactly the sort of instruction that was required. The greatest difficulty in this method, teaching by clinical demonstration, is obviously that when twenty-four gentlemen are watching one tooth a very few of them can see it thoroughly at a time; to meet this difficulty the demonstrations were arranged to overlap each other, so that the crowd round the chairs was diminished. This plan might in future be extended with advantage, there might be several gold fillings going on at a time, and the audience might circulate from one to another. Demonstrations illustrated by models and drawings and perhaps by patients, might with advantage be given in the lecture-theatre, and still lose none of their practical character. No doubt, as experience is the best test of such matters, the staff have made many mental notes of possible improvements in future courses, while no one will grudge them very hearty congratulations on the success of their first experiment.

At the Soiree of the Royal Society, held at Burlington House on the 9th inst., there were several things exhibited which were of much interest to odontologists. The sections of the tooth germs of *Ornithorhynchus*, described at page 313, were there, and it may be of use to our readers to know that a large number of drawings of

these sections will appear in the *Microscopical Journal*. But were equally remarkable were some sections of the horny tooth of *Myxine* (the Hag), *Bdellostoma*, and of the lamprey, exhibited by Dr. Howes and Dr. Beard. In the two former it was shown that a horny cone was super-imposed upon a tooth germ of the ordinary type, which latter went on to at all events some degree of calcification, it being tipped with something which was described as enamel but which looked more like dentine. Thus, there was a tooth germ, capable of forming a conical tooth, and actually forming a little cap of dental structure, and upon this was seated like an extinguisher the horny cone which constituted the functional tooth; and we have a tooth apparently possessed by an animal of the creatures in question, replaced by a structure which we should regard as distinctly of lower grade, a degeneration comparable with the general degeneration of these parasitic fishes. The very curious relation existing between the tooth germ and the horny tooth, so very different from anything which might have been anticipated, makes it a matter of interest to enquire what the relation between the tooth germs and the horny plates of the *thorhynchus*, but the sections exhibited, and the drawings which will appear in the *Microscopical Journal* do not so far indicate a close relationship. One of the skeletons of the African *thorhynchus* race, sent home by Emin Pacha, was also shown. The proportions are those of a well-formed adult, and are not suggestive of any stunting of the individual, and the cranium was well shaped, the teeth, however, which were much worn down, looked disproportionately large, and it is stated by Professor Flower that the dental arch is exceedingly high in these pigmy races.

AN attempt is being made to call together the graduates of the original Philadelphia College of dental surgery, a body which was chartered in 1850, began its work in 1852, and was dissolved in 1856. The shortness of its life arose from the trustees who exercised their power of granting honorary degrees to persons who, in the opinion of the faculty, could not have obtained them in the ordinary course, this having occurred in one instance in 1855, and again in two instances in 1856, led to the resignation of the whole faculty. As we, in common with many of our atlantic contemporaries, have frequently found it necessary to impose strictures upon the laxity with which American colleges have granted their degrees, it is a grateful duty to put upon record

such was not the spirit in which the early founders of dental colleges interpreted their responsibilities. The faculty which thus earned the gratitude of the truest well-wishers of dental education, consisted of Drs. J. D. White, Ely Parry, Robert Arthur, Elisha Townsend, T. L. Buckingham and D. B. Whipple.

THE following extract from a paper by the Hon. Mr. Justin Stephen, published in the May number of the *Nineteenth Century*, (page 757) may be read with advantage by those who cavil at the drafting of the Dentists Act, and who cast blame upon those who were concerned in its construction for their failure in the attainment of the unattainable: "By definition I mean the limitation of the meaning of a word already in use, so as to make it include or exclude senses in which it is not intended to be used. It always involves more or less of an appeal to the reader's good faith, for it is almost impossible to define in such a way that people cannot misunderstand or misrepresent if they wish to do so, and the attempt to frame definitions which are proof against disingenuousness, often involves so much intricacy that the definition does more harm than good. Instances of this in legal definitions are innumerable, as every lawyer knows."

AN inquest was held recently in a Northern town, concerning the death of an unmarried woman, aged thirty-two, who resided with her parents. From the evidence it appeared that about eight weeks ago the woman had an attack of "tic," and consulted a professed herbalist, who gave her medicine, pills and powders. The woman's mouth shortly afterwards got into a very bad state, her teeth became slack, and the floor of her mouth was in a condition of slough. She grew very weak, and often fainted. Her mother refused at last to let her take more of the medicine, and threw the powders away. She was attended before her death by a qualified surgeon, who afterwards made a post-mortem examination, and was of opinion that death was caused by poisoning by mercury. The inquiry was adjourned for a fortnight.

MORE souls are won by compliment than by complaint; a truth which the Dublin committee appears to be familiar with, for the largeness of their preparations implies great faith in the power and willingness of those members of the Association to whom they look to fill the tubes and occupy the spaces which they

are getting ready for them. Room for 1,600 plaster models glass, and means of exhibiting over 500 specimens of abraded teeth, even after the racks which hold the Wolrab tubes are bespeak great confidence in the co-operation of many exhibitors. We have no doubt this confidence will be justified.

INTENDING exhibitors of models will do well to note the following directions, as by so doing they will materially lighten the work of the committee :—All regulation models should be not more than three inches or less in depth, and should not exceed three inches in three-and-a-half in extreme area. Each of the glass-covered racks will hold about forty such models, and, altogether about 950 models can be shown. Of another class of models, having a depth of not more than three inches, and a surface area not exceeding three inches half inches by four-and-a-half inches, 650 can be shown.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The next examination for the Licentiatehip of Dental Surgery of the Royal College of Surgeons of England, will be held on Monday, Tuesday and Wednesday, the 11th, 12th and 13th of June.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.—During the April sittings of the Examiners for the Licence in Dental Surgery, the following candidates were examined :—Alfred Edward Donagan, Cambridge ; Edward John Moore, London ; Hodgkinson, London ; Thomas Gregory, Edinburgh ; John S. Walker, York ; Robert Keith Common, Edinburgh ; Kevin J. O'Duffy, and Thomas Cuthill McKenzie, Edinburgh, passed the First Professional Examination ; and the following gentlemen passed the Final Examination and were admitted L.D.S. :—George William Welham, London ; Herbert J. Ezard, Bath ; John Stephen Walker, York, and Kevin J. O'Duffy, Dublin.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At the April sittings of the Dental Board, the following candidates passed the respective examinations :—*First examination*, Duncan, Glasgow. *Second examination (and admitted Licentiate)*, Richard J. Hall, Hanley ; William Hutchison, Glasgow ; P. Thomson, Glasgow.

SOME special interest attaches to a recent examination for the L.D.S.I., arising from the circumstance that the suc-

candidate, Mr. F. E. Davar, is the first Indian who has taken the diploma. We congratulate Mr. Davar, and trust that the example which he has set may shortly be followed by many others from our Indian dependency.

MR. JOHN STEWART, Dental Surgeon, of Perth, has been re-elected to the School Board of that town.

STATEMENT of operations performed at the London Dental Hospital, Leicester Square, during the month of March, 1888.

Number of patients attended	...	...	...
Extractions :				
Children under 14	...	...	...	424
Adults	...	...	...	985
Under Nitrous Oxide...	...	...	...	830
Gold Stoppings	...	...	...	433
Other Stoppings	...	...	...	1133
Advice and Scaling	...	...	...	113
Irregularities of the Teeth	...	...	...	158
Miscellaneous and Dressings	...	...	...	505
Total	...	...	...	4581

JAMES F. COLYER, *House Surgeon.*

STATEMENT of operations performed at the National Dental Hospital, during the month of March, 1888.

Number of Patients attended	...	...	...	1916
Extractions :				
Children under 14	...	...	...	218
Adults...	...	...	...	434
Under Nitrous Oxide...	...	...	...	612
Gold Stoppings	...	...	...	180
Other Stoppings	...	...	...	630
Advice and Scaling	...	...	...	310
Irregularities of the Teeth	...	...	...	245
Miscellaneous	...	...	...	189

Total 2818

FRANK LANKESTER, M.R.C.S., &c., *House Surgeon.*

STATEMENT of operations performed at the Victoria De
Hospital of Manchester, during the month of March, 1888.

Number of Patients attended	...	...	...	895
Extractions :				
Children under 14	}			
Adults		...	...	565
Under Nitrous Oxide...		...	...	111
Gold Stoppings	...	...	...	73
Other Stoppings	...	...	...	160
Miscellaneous	...	...	...	209
Total	...	...	...	1118

CHARLES H. BUCKLEY, L.D.S.Eng., *House Surgeon*

CORRESPONDENCE.

We do not hold ourselves responsible for the views expressed by our Correspondents.

The Annual Meeting in Dublin.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—I am afraid I shall not be able in this month's Journal to fulfil the promise I made, to go fully into our details of organization for the Annual Meeting, but I trust you will not take it amiss to mention some of the arrangements we have made for the amusement of our lady visitors, while the members are absorbed in scientific or artistic dentistry at the meeting.

We have organised for the lady visitors special carriage excursions in Dublin, under the guidance of the Rev. Canon Bagot, LL.D., starting about ten o'clock each morning, and terminating in time for the excursion party to join our members at lunch, at the Dining Hall of Trinity College. We hope by thus making special arrangements for our lady visitors to relieve their male friends of an anxiety, unlikely to arise, with respect to their being "neglected" or "bothered" in hotels or lodgings, and thus, having the anxiety of the well-being of the ladies off their minds, our members will be free to give their attention to the interest of the meeting. We have planned to give lunch on each day of the meeting in the Dining Hall of Trinity College, for the special convenience of our members, as well as to afford them an agreeable opportunity of meeting in a social way. These lunches they can bring their lady friends when provided with the necessary tickets of admission. The conversazione given by the Irish Branch in the Royal College of Surgeons, and the President's garden party will also give the ladies an opportunity of seeing something of Dublin ways, and the latter entertainment will take place in the Fellows' Garden of Trinity College. The hall we have asked permission to use is the hall of Trinity College.

sion to use for the annual dinner has a commodious gallery, so that the ladies can hear the speeches and view the festive scene from a coign of vantage, while during the dessert, we can arrange to have them supplied with ices, and other light refreshments which they so much appreciate. I regret I have not been able to obtain any special rates for the members of the British Dental Association while travelling on the Irish Railways, but I understand that some new routes will be available this year to Connemara, the Donegal Highlands, the Giant's Causeway, Killarney, and the South of Ireland. Members who contemplate a holiday stay in Ireland should purchase the tourist tickets issued by the English Railway Companies or Messrs. Gaze, as I find from careful enquiry that no better terms are available than those offered by these tickets. Members can arrange, through Messrs. Gaze's Dublin manager, to make excursions in small parties in a comfortable way, at a fixed rate, in the county Wicklow or other parts of Ireland. The annual excursion will be held on the Hill of Howth, nine miles north of Dublin, and from which splendid views of Dublin Bay and the Three Rock Mountains can be had looking south, while on a clear day the Mourne range of mountains, with Sleeve Donard in the County Down, can be seen beyond Ireland's Eye and Lambay in the north. Howth can be reached by road or rail, and the walk round the cliffs by "the New Path" is well worth taking, and will afford to those of our members, who enjoy a "constitutional," an opportunity of enjoying one of unusual beauty and charm.

I am, sir, yours faithfully,

W. BOOTH PEARSALL, F.R.C.S.I.

13, Upper Merrion Street, Dublin, *April* 28th, 1888.

The Annual Museum.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—I regret I am unable to send you for publication in the Journal, the names of the members who have promised to co-operate with us in the organisation of the Literature, Surgery and Work-room Sections of the Annual Museum. The list is not yet complete, some members having omitted to reply to our invitation sent out early in March, with a printed statement of the scheme for the Annual Museum. Up to this date no specimens of any kind have been sent to us, but we are busy at work arranging the material we have already in our hands in Dublin. The new specimen racks to hold the Wolrab bottles have been placed in the hands of a contractor to make, and we are promised their delivery next week; they will contain four rows of twelve bottles in each row. We have also designed a set of trays or drawers 18 in. by 24 in., covered with glass, to take models of regulation cases 2 in. deep, and a deeper pattern will take models, such as we use in mechanical work, 3 in. deep, $4\frac{1}{2}$ in. antero-posterior diameter. These trays or drawers will hold from thirty to forty models in an orderly way, and when they have been filled with carefully classified

models, numbered and catalogued, will be built into screens to the convenience of examination by our members, who, catalogue in hand, study the material they are most interested in.

If our members will send on the models or specimens they wish to exhibit, as soon as possible, it will be a very great help, as we shall only be able to properly classify, label, number, and catalogue the material we have provided for in the racks and model drawers. It will also enable us to know what sort of glass cases to hire, to what instruments and other matters the owners may not wish to be touched. Under no circumstances will members be permitted to place exhibits in the museum on the day of the meeting; all specimens should be sent on beforehand.

I have also to mention that the ballot for space in the Manufacturing Section will take place on June 15th, after which date no application for space will be considered. I would ask you to draw the attention of the dental manufacturers to the terms of our invitation, and induce them to favour us with diagrams or plans of their requirements in counter and floor space, thus helping us to make better arrangements as will enable our members to see everything of interest, and possibly save some unnecessary friction we should gladly avoid. We feel if each manufacturer has his counter space and the floor space marked out beforehand, all misunderstanding will be avoided, as there will be nothing to do but transfer the goods from the opened cases to the part of Section I. he has been allotted.

I remain, yours most faithfully,

W. BOOTH PEARSALL, F.R.C.S.

13, Upper Merrion Street, Dublin, *May* 1st, 1888.

Papers at Societies.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—Your correspondent "X" has, in your April issue, brought forward a subject of considerable importance. Going a step further, he has pointed out the abuses which may arise at societies where no committee exists for the selection of offered contributions, where the committee ceases to vigilantly perform its duties, or performs them in a merely perfunctory manner. These abuses—happily on a small scale only—have been illustrated during late years at the Odontological Society. The Odontological Society has now existed long enough, and has done enough good work to achieve a respectable reputation as a scientific institution, so that when papers are accepted from eminent scientific men not members of the Society, it is a question on which side lies the obligation—the donor paying the Society a compliment which the Society returns by accepting the contribution. In this way honour has—so to say—been reciprocated on numerous occasions between the Society, and such distinguished men—men known throughout the world of science—as Lauder B.

Henry Power, Victor Horsley, Bland Sutton, and Eve. These are men whose contributions would be received without question at any scientific society; their names would be firstly, guarantee sufficient that their work was *bonâ fide* result of honest, scientific labour, and secondly, assurance that what might be presented for publication would be an addition of at least some value to science. This latter essential requirement, wanting which no paper ought to be accepted from any non-member, has been conspicuous by its absence on more than one occasion in late years. If your readers will turn to the Journals of a year or two back, they will find some criticisms of Transactions of the Society, where the reviewer, speaking of certain papers contributed by non-members, says these papers seem to have been presented under the belief that "anything would be good enough for the Odontological Society," and he goes on to show the inferior literary character of the papers and their worthlessness as contributions to dental science. It is not necessary to attempt analysis of the motives of writers willing to present pseudo-scientific contributions, it is for the Society to be on its guard against such an imposition. Let the Council look to it. Let the Committee of Selection (which I believe exists) be requested to really perform their duty and to allow acceptance of no contribution from an outsider without proper scrutiny; so that we may not some day see the Society injured through acceptance, by some too zealous an officer, of a paper by a writer whose presence as an honoured guest at the Society may leave a stain not easily to be wiped out or made amends for by much subsequent good work.

London, *April 20th*, 1888.

Yours faithfully,

EX OFFICIO.

The "Electrical Thermometer."

SIR,—Some few years ago I adopted a precisely similar arrangement to that described by Mr. Braun in the JOURNAL OF THE BRITISH DENTAL ASSOCIATION for April. My thermometer is graduated to 585° Fah., and the upper platinum wire employed to complete the electric circuit is moveable, so that any temperature between 80° and 585° may be registered. I had my thermometer graduated to a high degree for chemical experiments in the first instance.

I have also employed a 5 c.p. incandescent electric lamp, in a glass tube, surrounding the lamp with pure anhydrous glycerine. The specific gravity of ordinary (pharmacopœia) glycerine is 1.250, and contains about 5 per cent. of water, this does not answer so well as the former, and is liable to crack the glass.

C. J. BOYD WALLIS.

Professional Charges.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—My attention has been called to a letter in the February number of your Journal, signed "A Dentist of Twenty Years' Experience," and to your reply in the present number. As the father of the boy

mentioned, I beg to give you my version of the facts, and would do you in fairness to the dentist referred to in your answer and to request you to insert the same in the next issue of your journal ; with your consent thereon. My son, a boy of fifteen, at one of our public schools was sent by his house-master to your Dentist Correspondent to have a tooth, which pained him, treated ; this your Correspondent stopped him, and without communicating either with the house-master or myself, persuaded the boy to have four others also stopped, one of which had to be extracted within a few days, the pain caused by the stopping of the stopping being intolerable ; whilst another was so inefficiently treated that when the boy came home for his holidays, a short time after, the stopping had to be removed and the tooth properly prepared and stopped by my own dentist.

Now as to the charges (£6 6s.) I maintain that *the dentist* had no right to stop my boy's teeth wholesale, without first communicating with the house-master or myself—there being no immediate necessity (as in the first case) for his doing so. 2ndly, Your "Dentist of 17 Years' Experience" is not, I understand, entitled to write the L.D.S., R.C.S., after his name ; but that until within a very short date, I am informed, he kept a chemist's shop in a small country town. Are "*guinea fees the rule*" with such practitioners ? 3rdly, I am in a position to prove that he does not make these high charges for other patients outside the school. 4thly, The medical man who attended was the school doctor who is paid by salary, and my wife assures me that no nurse was in attendance.

Next as to the "Ethics" of the case. I have never shown the account to my dentist, nor have I ever stated that I have done so. The account was returned to the house-master by the next post, and I received it from him ; who wrote me within a post that he had referred it to the dentist, protesting against his exorbitant charges, and that he had not seen it since. It was not until months after this that I first mentioned the matter to my family dentist, who has in no way been guilty of a breach of professional etiquette in respect thereto.

I am yours faithfully,

April 23rd, 1888.

THE FATHER OF THE BOY

NOTE.—ANONYMOUS letters directed to the Secretary of the Association cannot receive attention.

P.O. Orders must be accompanied by Letters of Advice.

Communications intended for the Editor should be addressed to the Editor at 11, Bedford Square, W.C.

Subscriptions to the Treasurer, 40, Leicester Square.

All Contributions intended for publication in the Journal must be written on one side of the paper only. The latest date for receiving contributions for the current number is the 5th of the month.

Members are reminded that their subscriptions are due in JANUARY, and are requested either to remit them direct to the Treasurer, at 40, Leicester Square, or if more convenient, to pay them through their bankers, or through the agency of one of the Dental Depots, and so save unnecessary postage, &c., in applying for the same.

SPECIAL NOTICE.—All communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

THE JOURNAL
OF THE
BRITISH DENTAL ASSOCIATION
A
MONTHLY REVIEW OF DENTAL SURGERY.

No. 6.

JUNE 15, 1888.

VOL. IX.

The Dublin Meeting.

THE annual meetings of professional and scientific societies depend for success on a variety of influences, some of which are subtle in character and little subject to the control of those on whom the task of organisation falls. It is never, therefore, quite safe to be wise before the event in regard to such gatherings. But, although it is quite true that factitious influences sometimes mar arrangements that seem all but perfect, yet, as a general rule, the success of a meeting will be in accord with the extent and completeness of the preparations for it. We should, therefore, run very little risk if we were to be boldly prophetic as to the outcome of the meeting in Dublin, the preparations for which bespeak the utmost energy and zeal on the part of the different committees.

The work for all such gatherings is of a two-fold and calls for corresponding diversity of character workers. There is the actual labour of organisation, arrangement, requiring energy, patience and resource; there is the much more delicate work of awakening the interests of those whose presence it is desired to secure, making the most of that interest when it is once aroused. There is already abundant evidence before us of the thoroughness with which our Irish friends are performing the first of these duties. We have only to point to the care and ingenuity displayed by the Museum Committee, which bids fair to give something of the character of permanent importance to this feature of the Annual Meeting, the confidence which should be engendered in the minds of intending exhibitors by the proofs already afforded of the minute care which will be taken of all objects committed to the care of the committee, ought to result in the safe keeping of many valuable specimens which might naturally be lost or held, if a less careful spirit were exhibited. Museums are of course subject to the well-known law, from which even "the best regulated families" are not exempt; but the assurance of Mr. Pearsall's letter in our present number will do much to allay the little fear of accidents. If, therefore, specimens continue to arrive in Dublin in satisfactory numbers, the cause may be sought elsewhere than in dread on the part of their owners of mishaps likely to befall them.

The contagion of enthusiasm loses half its power when it operates beyond the area of personal contact, and a newspaper is not the happiest medium through which to convey it. The glow of sympathy on which it depends finds no adequate outlet of expression in the formal coldness of the printed word. All we can hope to do, therefore, is to quicken the latent interest of our readers in what is being so well done, by a recital of the salient features of the work, a

recording the effect which it is producing on the scientific and professional bodies in Ireland, who are eye witnesses of it. It will suffice to name a few instances of the friendly spirit which is being shown towards the committee's labours. The use of the physiological laboratory of Trinity College, and of the large collection of microscopes used by Professor Purser, has already been granted, and it is rumoured that the provost and fellows of the college purpose entertaining a limited number of our members.

The Royal University has granted the use of its great hall for the annual dinner. Last, not least, the Royal Irish constabulary, anxious to aid, but doubtful how their help might avail, have hit on the happy idea of offering the services of their admirable band.

Mention of the annual dinner recalls the splendid entertainment given to the deputation which visited Dublin last year, and reminds us at the same time that the dinner this year will take place on the Thursday, instead of the Friday as heretofore. Although the change has been made by the Reception Committee to suit local circumstances, we are not sure but that it may prove a useful innovation and perhaps be converted into a precedent. We cannot help congratulating the Irish Branch on the composition of their Dinner Committee. "That an Englishman, like an oyster, only opens with a knife," is at best but a half truth; but it is nevertheless certain that the general impression which a meeting leaves on the minds of those attending it, does depend in a measure on the success of its public dinner. A dentist is as subject as any other mortal to gastronomic influences, and it is when he has

Judicious drank, and, greatly daring, dined,
that he fully realises the pleasure of renewing old friendships, and making new ones. The Dinner Committee have many little details to arrange, which require to be dealt

with in a considerate spirit. They have acted wisely, I think, in one particular, on which there is sometimes a difference of opinion. They have fixed an inclusive contribution. This obviates the confusion of second payments, though it may seem to impose a tax on a limited number, to whom wine presents no attraction. Men do not, however, on these occasions look for a strict equivalent for what they pay. All social, and indeed all corporate existence depends on the readiness of each individual to pay for what which he does not himself enjoy, and both local and imperial powers have of late years given men so many opportunities of practising this virtue, that the call to so strenuous an exercise of it, as is here involved, is scarcely likely to attract the slightest notice, much less to raise a protest.

So much for organization. For those delicate matters which depend entirely on a sympathetic power to perform, we can trust the geniality of the Irish character. "Men of cheerful yesterdays and bright to-morrows," our brethren across the water will, when the happy hour arrives, give that warmth of welcome to their friends, which Mr. Russell's letter graphically expresses under the enigmatic phrase "mille failthe"—a phrase, the sound of which is familiar in meaning, even to those to whom the sense is not clear. Like the warrior "who craved no more comfort than the sun than light to lighten him to battle," the Irish Committee ask no further grace from their guests than the light of their presence, which they may well be said to have deserved by the cordiality of their invitation and the energy with which they have carried through their preparation for what seems likely to prove a right and hearty Irish welcome.

ASSOCIATION INTELLIGENCE.

Central Counties Branch.

A SPECIAL meeting of the Central Counties Branch was held at 71, Newhall Street, on Thursday, May 17th. President, W. E. HARDING, Esq.

The gathering was a large and representative one, members from most of the large towns in the Midlands being in attendance.

Mr. WALTER CAMPBELL, of Dundee, exhibited his improved water motor with the various attachments in connection with it, including the upright arm, and several ingenious wall brackets, telescopic in action. The great ease with which the motor worked gave general satisfaction, and where the water supply is of sufficient pressure, there is little doubt that it will become the motor of the future, as it supplies a ready, safe, and easily controllable power, and will prove an invaluable assistant to the busy practitioner. Mr. Campbell remarked:—"I have been asked by more than one member present, about the pressure necessary to run the motor. Well, I may say, I have run my dental engine on this upright, with a pressure registered on a gauge at 25 lbs., but I prefer having 35 lbs. or 40 lbs. at command, so that I can run my engine fast, which I do occasionally, although not often. I have actually a pressure of about 90 lbs., but this I reduce by shutting off with a special tap, till the pressure is only about 35 or 40 lbs. I would not recommend this motor to any one who cannot command a pressure of about 35 lbs., and the supply pipe taken from the main, where the supply would be less likely to be disturbed. Of course where the pressure is much higher it would not so much matter, although the supply was taken from a service pipe."

I may mention that a little escape from the motor, when running, is really of no consequence. The small pipe projecting from the trough is for carrying off this escape. This is best done by attaching one end of a piece of rubber tubing to this pipe, the other end to a short piece of metal tube soldered to the outlet pipe. A piece of rubber tubing with metal tube attached is now supplied with motor.

Besides this upright engine, which I have attached to the motor, I have brought for your inspection three wall suspension brackets. One is unfinished, and I do not know that I shall finish it. It is telescopic, and run by an endless cord from motor to engine, but

the noise from the pulleys is greater than I could have anticipated. This other is after a design by Mr. Mathew, which he speaks of, while this one, and what I consider the most universally useful, is, as you will see, telescopic, and runs with extremely little friction, and the range of movement is all that could be desired. It is on the principle of bracket engine with shaft rotating inside a tube, first used by Mr. Brownlie. This I have made telescopic, and somewhat lighter, which I consider an improvement.

Mr. Brownlie writes of it:—"You will be pleased to hear that I have made a beginning with the motor, and I cannot resist the impulse to write and thank you. You have made the whole process so comfortable for your debtors. I have only had three full days of it yet, but the comfort it has proved. I have but to sit down beside a patient with a whole mouthful of roots, and this most docile and obedient of agents grinds them down for me."

Mr. BREWARD NEALE remarked:—"It is by far the best motor I have seen, and appears to meet every requirement, the power being lost or interrupted when working at a slow speed is the great advantage over the electric and other motors, whilst it is perfectly under control, and answers to the slightest touch, and I find I intend to have one fitted with as little delay as possible, for I consider it perfect for the requirements, and cannot thank Mr. Campbell enough.

Mr. H. N. GROVE, of Walsall, read notes upon electricity applied to modern dentistry, which he illustrated with a valuable apparatus. The power was obtained from a set of conventional accumulators manufactured by the Walsall Electrical Company, which were stored with electricity from time to time by dynamo engines from the same firm at a very trifling cost. The great advantage of the accumulators over the ordinary batteries is the fact that the power stored is absolutely uniform and reliable, far away with the uncertainty of the older cell system. Mr. Grove had in operation at the same time attached to the accumulators a novel swinging electric lamp, an improved mouth-mirror, Bonwill's mallet, and there was no interruption in the current or an uniform power throughout. The apparatus is a great advance upon anything of the kind hitherto exhibited applied to dentistry, and gained unqualified approbation from the members present.

Mr. BREWARD NEALE exhibited an improved operating chair, which was attached by an elbow joint to the wall, allowing a wide range of movement, and running upon castors was easily

with but little effort changed from one position to another, so as to be quite out of the way when not in use.

Mr. CAMPBELL said, I am very well pleased to have seen this stool so ingeniously devised by Mr. Neale, it is certainly a stride in the right direction. I consider a stool a necessary piece of furniture in a dental surgery, and have for some years used the Lyon stool. It has been a great comfort to me, in spite of its one or two drawbacks, its size and weight, being I consider, cumbersome. Allow me to say to those present who have not taken advantage of this useful piece of furniture, that they should begin to do so when operating upon patients with whom they are most at ease.

Mr. FRANK E. HUXLEY showed two specimens of operating chairs, which he had devised to meet a want long felt in our hospitals of a cheap chair with a variety of movements, they were elegantly constructed of oak and pitch pine, and manufactured by Mr. H. Downs, Birmingham, from designs by Mr. Huxley.

Mr. HUXLEY likewise exhibited a small water motor upon the turbine principle, suitable for driving work-room laths. It appeared to work very easily, and should be a valuable adjunct to the mechanical department.

Messrs. C. ASH & SONS kindly sent down a large number of their latest specialities, including a variety of forceps of modern design, and new patterns in clamps and matrices.

During the evening Mr. W. PALETHORPE gave a successful demonstration with Steurer's new cohesive gold, which can be worked without annealing, and was exhibited last year in America at the International Medical Congress.

Hearty votes of thanks were accorded at the close of the meeting to the various exhibitors, bringing to a termination one of the most interesting and instructive gatherings of the Central Counties Branch.

Midland Branch.

At the Council meeting of the Midland Branch, held in York, the following gentlemen were duly elected members of the British Dental Association, and of the Branch, viz. :—J. E. Greaves, Leeds; H. Wyles, Leeds; J. S. Jefferson, Leeds; J. M. Dennis, Great Grimsby. To the British Dental Association only—F. A. Franks, Liverpool. To the Midland Branch—F. Sherburn,

Leeds ; H. C. Quinby, Liverpool ; R. Ashby, Scarborough ;
W. A. Turner, Leeds.

W. H. WAITE, *Hon.*

ANNUAL CONFERENCE AT YORK.

This year's Conference of the Members of the Midland Branch of the British Dental Association was held in the City of York and commenced on the 17th ultimo, with a reception at the residence of Mr. W. Glaisby. The invited guests, numbering 150, included representatives from the different towns included in the branch, and visitors from London and Dublin. The gentlemen were accompanied by their lady friends, and some exceedingly pretty costumes were worn on the occasion. The entrance had been arranged in order to effect a cooling retreat from the hot room. The morning room was fitted up as a refreshment room, the dining room as a card and smoke room. The two parlours were fitted up as drawing rooms. The dancing took place in the drawing room, the music being supplied by Mr. Mears' string quartet.

On the following day the Conference was held in the Lecture Institute, and there was a good gathering of members between nine and ten o'clock, to witness the demonstrations, which were as follows :—By Mr. M. Johnson, F.R.M.S., on Preparing and Mounting Sections of Teeth for Microscopic Examination ; by St. George Elliott, of London, who fixed a gold crown on a molar, the stump having been prepared by Mr. Brunton, of Leeds ; by Mr. G. G. Campion, on Balkwill's Method of Rotating Instruments ; and by Mr. G. Brunton, on the Use of the Matrix.

After the demonstrations, a meeting of the Council was held in the lecture room. This was followed by the Business Meeting, which was held in the same room, and at which Mr. F. F. Bullin, the president, occupied the chair.

The SECRETARY stated that he had received several letters of apology and regret from gentlemen unable to be present. He then read the report of the Council.

After referring in general terms of satisfaction to the progress made by the Midland Branch under the hospitable presidency of Mr. Bullin, and recalling the Chester meeting to the recollection of those present, he proceeded as follows :—

"In commemoration of our visit, Mr. Bullin has very generously restored and refurnished one of the principal wards of the

ter Infirmary, at considerable cost ; besides which, as most of us are aware, he has succeeded in obtaining an alteration of the rules of that Institution, securing for all time, that the honorary dental surgeon shall have a seat on the Board of Management of the Infirmary.

During the past year also we have to record one of the most important events that can happen within our borders, viz., the revision of the Dentists' Register. It would be more correct to say the commencement of revision, for it is a work that must go on year by year, and that can only be effectively carried out in the degree in which the dentists themselves assist and promote it.

What has been done this year must be repeated on a smaller scale every year, and we cannot too often remind our brethren that it is the bounden duty of every worthy practitioner to take a personal interest in this matter, and to report either to the secretary of his branch, or to the secretary of the Medical Council, any facts coming under his notice, relative to the decease or removal of any person who is registered in the Dentists' Register.

We have held two very successful meetings during the winter, one at Lancaster in October, the other at Leeds in February. Upwards of fifty members and friends were present at the latter meeting. The Council are anxious to increase the number of such informal meetings, and will be happy to confer with members in any district where there is a desire for professional advancement.

The number of members of the Branch has steadily increased to a considerable extent lately, owing to the earnest and faithful efforts of our new president, T. E. King, Esq., who has personally devoted much time and labour to this particular work. Although we lose some by death and other causes, it is gratifying to know that the Branch is growing in numbers and influence, maintaining its position as the premier Branch of the British Dental Association. The actual number of active members on the roll to-day is 139.

As you are all aware, three of our Council retire each year by rotation, and you will have the opportunity either of re-electing them, or of appointing others in their room.

We have also the privilege of nominating candidates to fill vacancies on the Representative Board, and the Council have agreed to nominate for this position, J. A. Fothergill, Esq., of Darlington.

education into deep consideration, and adopt means in some form that will accomplish the work. We already acknowledge the progress made since the passing of the Dental Act. We recognise the authority of the Act, for in every case of prosecution it has enforced its power. The Act is the foundation upon which registration and compulsory education must rest, and it is within the authority of the British Dental Association to compel the profession to conform to the restrictions of the Act. We have in the Journals one of the means of education, and we recognise the advancement during the last eight years. But this is very limited as it applies mostly to the profession.

Can the three primary objects named by the president in Dublin be wrought out into a practical form, and based on some broad principle, and adapted to meet the purposes required—to educate the profession, educate the medical profession, and educate the public? The second item in Mr. Turner's programme is peculiarly interesting in these counties, as they suffer most for want of this education. We must appeal to the Members of the Board who represent us. I ask the young men who are coming from the Colleges educated, qualified, and registered, to look at these matters and to devote some of their time to the political interests of the profession.

The time has arrived when something might be done.

Manchester may have to speak once again. I ask you to look back a few years, not so far as 1841 or 1855, and remember the movements arising at special periods. 1871 was an eventful time.

When the Odontological Society rejected the discussion of dental politics, the power of appeal was gone; this awakened the minds of many. Great expectations were sent to the winds, and the winds blew the seeds, not upon the rocks, but on fertile land, where they took root, and you have living members who have devoted their energies and made great efforts to advance education in the profession all round. This was not deemed worthy of a place in the jubilee retrospect, but it did not require it, for the history is written on the hearts of living men, and the young men in our ranks will live to tell of the events of the past from 1871, 1875 and 1879, and will speak of the time when England's sons were rejected and driven from their own country. Men with hearts full of fire and determination, who have stood forth and done battle with the enemy of indifference and helped to build the wall of the castle of the British Dental Association.

In 1875 Manchester discussed the rejected politics and moved them to London. In 1879 the transformation of the Dental Reform Committee into the British Dental Association took place in Willis's Rooms. The results we have before us in this meeting at York.

Congratulate yourselves on our friendly associations. The spirit of cold-shoulderism has passed away. It was a terrible burden to meet cold shoulders; some of them were very hard. They have been forced upon men's minds and produced unity of action. The young men in our ranks should read the history of the profession, mark the leading events, see the rugged rough road laid with iron rails, but filled with large boulders of selfishness and indifference, made as hard as flint, which required years to break and turn into a pleasant form. See the difference now. We are met as brethren in unity for one common purpose. The young men can follow upon the lines, and consolidate the work which is in their possession. To Sir Edwin Saunders and Sir John Tomes the profession will ever do honour for the work they have put forth to further the advancement of education. We have a great work before us—to educate the profession, to educate the educated—which is the hardest work of all, and also to educate the public. We have power in the British Dental Association and its branches. I refer to the annual meeting held in London in 1879. Try to realise its value. And I ask you to anticipate the next meeting we have in store to be held in Dublin next August. It will do much towards advancing that department of education which is much desired.

Dr. WALKER said they could quite understand that his sympathies thoroughly went with Mr. Wormald as to the progress of the British Dental Association emanating from the meeting at Manchester. He would like to ask whether Mr. Wormald quite understood why the Odontological Society did not accept the discussion of politics? Did Mr. Wormald understand that it was because it was a scientific society?

The PRESIDENT moved the adoption of the report, which was seconded by Mr. W. Glaisby and carried unanimously.

The election of three gentlemen to the council was then proceeded with. The result of the voting was in favour of Mr. Brunton, Campion and Glaisby.

Mr. BULLIN then delivered his retiring address as follows:—GENTLEMEN,—At our last annual meeting held in Chest-

did me the honour of unanimously electing me to the presidential chair.

In my address, delivered on that occasion, I exercised the prerogative which I then claimed, and which I still claim for each succeeding president, viz., the right to "*enter upon criticism of some of the things of vital interest to the profession.*" Some of our critical friends considered this to be a new departure, and if it is so, I am proud in the thought that a Midland president has created a precedent in the interests of the British Dental Association. Yielding, however, to the wishes of friends who are more substantially interested in the future of our profession than I am, I will, on this occasion, refrain from discoursing on debateable subjects, to which I shall refer in a letter addressed to you before the end of the year, this course to be continued annually if I consider it necessary.

In retiring from this post of honour, it is my pleasing duty to congratulate you upon the substantial progress of our Branch during the past year, in the direction of much-needed reforms. It has been a lively year. Many subjects have been discussed with warmth, if not in fairness and good humour. Thanks to our unselfish and far-seeing honorary secretary, whose energy has proved contagious, many of our younger brethren have been raised from a state of apathy, as evidenced by the increased attendances at our informal meetings at Lancaster and Leeds, and the numbers who have joined our ranks. This is a good omen for the future. Many of you doubtless have read, and perhaps forgotten, the old tale in Virgil's "*Æneid*," Book v. 638, how the Trojan dames, accompanying Æneas in his flight from Troy, became weary of the sea and long deferred hope of settlement, and when in Sicily, determined to put an end to further voyaging, by setting fire to the fleet; and how Iris, personifying Berve, as she threw the first torch, exclaimed, "*Jam tempus agi res*," ("Now is the time for action"), and supplied all posterity with an animating and inspiring motto, which has ever since inspired the prompt execution of many a noble deed, and decided the destiny of many a wavering interest.

I think last year the dentists' friend, Dr. Waite, had this incident in his mind, when, mourning over the disgraceful state of the Dentists' Register, he threw himself into the work of expurgation with "*the time for action is come*," and this notwithstanding his physical infirmity. In addition to this, Dr. Waite assisted your

humble servant in claiming and securing, *in your name*, the position of the future hon. dental surgeon to an important special hospital. He helped in that successful battle against pride, arrogance and impertinence, not for himself, but for your sons and your sons' sons, and as an example for other branches to follow.

Again, his wise and thoughtful remarks, at Lancaster, led to a reform in the Business Committee. I am pleased to hear that the hon. secretaries of branches will, for the future, be members of that committee. This is a desirable instalment of reform too long deferred, and we must hope that it will lead to other members of that Committee having their duties more clearly defined.

As to the construction of the Publishing Committee of the Journal, I will not say anything at present. I would glory in no more, but in duty to you, who have borne with me for a year, and to myself as one of your officers, I am bound to say a few words, and they shall be very few. In the year I have honestly and fearlessly done my best for the interests of the younger members of our profession. I prepared my Chester address under a strong sense of duty, and with the least ill feeling to any man in our profession. I attacked and exposed certain doings prior to 1859, but did not intend to impugn a single member of the British Dental Association. The abuse followed in the M.R.C.S. is a matter of history, and before you to-day to say, that in what I have written during the year, strong in the sense of right, I have nothing to regret. I have fought only with the sword of truth, and I am not aware of the results of the battle to this date. I am gratified with the measure of success that has followed the dental "revival" of a year ago, and it will go on when many of you present shall have passed away. I glory in the unity of the British Dental Association. Keep well together; your strength as a profession will be tested before you are aware of it, for there are threats to our ranks.

In vacating the chair, I am happy in the thought that I shall be succeeded by a worthy son of a worthy sire, the bearer of an honoured and regal name in the city of York, and in the ranks of our profession. I am sure our friend, Mr. King, will do the honour and dignity of our calling, as his worthy father did for so many years in practice before him. I congratulate you

your choice, and with all my heart I wish him a happy presidential year.

Mr. T. MURPHY (Bolton) said he had great pleasure in moving that a very cordial vote of thanks be given to their late president for the able manner in which he had conducted the business of the Association for the last twelve months. He was sure those who were at Chester last year would not forget the pleasure they felt, and the generosity of their president, as well as the influence which he brought to bear on that meeting. He moved the vote of thanks with the greatest cordiality.

The motion was seconded by Mr. J. RENSHAW (Rochdale), and carried by acclamation and briefly acknowledged by the retiring president.

The PRESIDENT-ELECT (Mr. T. E. King, York), then amid applause took the chair, and visitors, as well as members, were admitted to the conference room. The following names were entered in the list of attendance.

Members—J. Renshaw, Rochdale; J. Charles Storey, Hull; W. H. Jewitt, Liverpool; Thomas Edward King, York; George Brunton, Leeds; E. H. Williams, Manchester; Henry Blandy, Nottingham; Sidney Wormald, Stockport; Thomas Murphy, Bolton; Fred G. Bullin, Chester; W. H. Waite, Liverpool; J. Lee Pike, Sheffield; Richard Rogers, Cheltenham; James M. Nicol, Leeds; A. Cocker, Halifax; E. J. Ladmore, Bradford; G. H. Osborn, York; J. Taylor, Dewsbury; John G. Wallis, Hull; L. Matheson, London; A. Howarth, Bradford; C. A. Barstow, Harrogate; John Taylor, Warrington; George G. Campion, Manchester; J. Harrison, Sheffield; T. B. Barnby, Bradford; Thomas Dilcock, Liverpool; A. B. Wolfenden, Halifax; William Simms, Manchester; George Holt, Bury; A. B. Harrison, Newcastle-on-Tyne; Thomas S. Carter, Leeds; W. G. Jones, Bradford; J. E. Greaves, Leeds; J. Morley Dennis, Great Grimsby; H. P. Fernald, Cheltenham; Walter Glaisby, York; Frederick Sherburn, Leeds; W. Grayston, Scarborough; W. Arthur Turner, Leeds; William Headridge, Manchester; M. Johnson, Chester; Frank Harrison, Sheffield; Charles Browne Mason, Scarborough; A. Pearson Wallis, Doncaster; R. Desmond Ashby, Harrogate; W. Broughton, Eccles, Manchester; and Arthur G. Rayner, York.

C. Read, Huddersfield; T. Wormald, Oldham; G. H. Lodge, Rotherham; Joseph Walker, London; J. W. Dent, Stockton-on-Tees; W. Booth Pearsall, Dublin; John R. King, Malton; Thomas

Headridge, Leeds ; W. St. George Elliott, London ; John H. Leeds ; Edward Dennison, Leeds ; and James Barstow, Halifax.

The PRESIDENT, on rising to deliver his opening address.

GENTLEMEN,—Not feeling myself qualified for, and not having done anything, to merit the honour you have conferred upon me in making me your President, I must begin by asking your indulgence. Knowing from experience how difficult it is to attain a position which has simply been inherited and not earned, you may be assured that I fully realise the responsibilities of this undertaking, and without being confident of receiving your forbearance, I dare not have engaged in the duties of an office which, on all previous occasions, has been held by men of eminent power or ability. I wish my father could have been here to take the place which upwards of half a century of experience in the dental profession would have fully justified him in occupying, but as this cannot be, I will cheerfully do my best to uphold the dignity of this Association and advance its interests in every way that is in my power.

Thanking you for the opportunities which you have given me by your trust to be able to make the most of them, and add a little to the great work which this important branch of our Association is doing, and prove myself worthy of the great distinction which you have bestowed upon me. All of us who had the pleasure of listening to our President's interesting and instructive address last year at Chester, must feel very grateful to those who have laboured against such difficulties and achieved so much for us in the past, but we are also conscious of the greater responsibilities that we have to bear, and the great efforts that it will be necessary to make if we wish to keep up and defend the high professional standard that has been set up for us.

Although dentistry is so closely connected with general surgery, it differs from all other specialities in the great advantage it possesses in having a special education of its own, thus making it distinct from and giving it a lead over all other specialities. This education, embracing a thorough knowledge of anatomy, physiology, chemistry and pathology, forms a common ground for consultation with general practitioners, and also provides an aid to diagnosis in cases of diseases of eye, ear, and throat, and parts in sympathy with the teeth, and which we so frequently have to bring into use in ascertaining to what extent the teeth are the exciting cause, in those ever increasing cases of nervous diseases and diseases connected with defective digestion, &c.

These advantages are much increased by the dental student receiving part of his education at a general medical school, and mixing with and associating with the students who are studying to become general practitioners, thus laying the foundation for mutual respect, and doing so much to dispel that narrowing tendency to which we, in common with all specialists, are liable to succumb.

Whatever advantages, educational or social, the surgical and medical qualifications which are open to us, have given to us, or now give to us as a profession, or to their individual possessors, it is generally recognised that they are in no sense higher dental qualifications, neither can they be regarded in the same light as university degrees, as there is a great amount of technical surgical and technical medical knowledge to be acquired which the student knows he never will be called upon to bring into use. Dual qualifications of this kind, like dual ownership in land, or bi-metallism, have a tendency to produce a conflict of sympathies and interests, and are consequently a source of weakness.

According to the ordinary law of the survival of the fittest, one or other of them will have to succumb, and I think we ought to be grateful to Mr. Bullin for the bold way in which he came forward and urged the claims of the dental diploma during his presidential year, and I trust that in the course of time the universities may be prevailed upon to grant dental degrees, and the colleges higher dental qualifications, thus giving encouragement to those who wish to continue their studies and increase their scientific knowledge in a progressive direction, instead of wasting their energies on the deviating and cumbersome surgical and medical qualifications, which are at present the only resource for those who are not satisfied with the bare qualification made necessary by act of parliament.

Practitioners in former times, and those who do not join, are unaware of the advantages such an Association as ours affords, but the misconception and prejudice which has prevailed among the inexperienced in regard to such Associations is now being rapidly dissipated, and there is a growing appreciation of the value of and necessity for intellectual interest in our profession—interest in the work we do, not the mere interest in making money and having a large practice, but the absorption of our faculties in the pursuit of our profession, and increasing its influence. It is only among a few of the older provincial practitioners that we

find those who desire to isolate themselves, not caring to associate with others whom they do not consider equal to themselves socially or intellectually.

All of us who have been members of this Association for a length of time must look back to days spent at these meetings with feelings of great pleasure and satisfaction. In many of our experiences here are the reverse of what we are accustomed to in every-day life. We have opportunities of hearing of others other than our own on questions of scientific and social importance and the leading practitioners in the provinces have, by joining the Association, an equal opportunity of taking an active and part in the work and progress of our profession, thus counteracting the centralizing tendency of the older societies.

In former times the provincial practitioner was isolated and had little or no influence, and therefore was compelled to leave the better organised, and consequently more active and enterprising practitioners in London. Now we have the means of showing our esteem and gratitude to our eminent men, by conferring distinction on those who formerly were unable to take their share of work and responsibility which their position entitled them to, and each and all of us have now opportunity of bringing forward any scheme for the advancement and improvement of our position, or of supporting by our vote any scheme of which we approve. Our welfare in the future depends so much upon the use we make of these privileges, that no one has any excuse for standing aside. If only all come forward and work together the result must be satisfactory and the future bright. If we look back but a few years we see what an unsatisfactory state things were then in. There were no gatherings of the members of the dental profession in this country, and no one was made to have meetings or conventions which would bring dental practitioners together from all parts of the country on a common ground of good feeling and love of social intercourse.

Before the year 1856, there had been no successful attempt to form any organization of dental surgeons, and it was only after considerable difficulty and much hard work by active and energetic men, that the Odontological Society of Great Britain was firmly established as a voluntary institution, just as Surgeons had been in the last century. We all know the great work that has been achieved by this Society, and whatever opinions may exist as to the wisdom of its early efforts being directed to

getting dentistry recognised as a part of surgery, and receiving its diploma from the College of Surgeons, I state without the least hesitation that the members of the Midland Branch of the British Dental Association are unanimous in their admiration for the great men who, by self sacrifice and indomitable energy, achieved so much. Our great wish is that members residing in other parts of the country may be able to appreciate and understand our efforts to assist in the great work of dental reform, and not suspect our motives and be jealous of our activity.

The meetings of the Odontological Society being confined to London, it left a large proportion of our profession in the provinces without that opportunity for mutual intercourse which is essential for progression. We are therefore not surprised to find the active provincial members making efforts to remedy this defect.

The idea of forming local societies had doubtless been previously thought of, but it was our energetic secretary, Dr. Waite, who first really mooted the question and presented it in a practical form in an excellent article in the *British Journal of Dental Science*, on Dental Societies, in the year 1866.

The basis of Dr. Waite's scheme was that local societies should be formed not independent of, but as branches of the Odontological Society, which he thought would thus become in deed, what it really was in name, the Odontological Society of Great Britain. The scheme was in fact for the formation of an association similar to the one we now have, only under the auspices of the Odontological Society instead of an independent association. Whether from the absence of desire for such organisation, or from the want of leaders, or from disparagement of the scheme on the part of the London members of the Odontological Society, the subject was only feebly responded to and received little support, until the year 1874, when the feeling that something must be done became general among the more active of the provincial members of the profession. But there was still the same tendency to lean upon, and expect help and support from the Odontological Society, and the same desire to work in unison and to avoid in any way interfering with the work of that society, which was then the only recognised head the dental profession possessed, but which at that time positively refused to be in any way connected with dental politics in the future, or to risk the maintenance of its influential position by affiliating itself with small local societies in

various parts of the kingdom. In March, 1875, the *Review of Dental Surgery* proposed the formation of a organisation, to be called the British Dental Association, conducted on the same lines as the British Medical Association, and invited the members of the profession to express their views on the subject, and decide whether it should become an accomplished fact. The idea was received favourably by the profession, and in June of the same year, the *British Journal of Dental Science*, in a leading article, expressed the conviction that the boundaries of the Odontological Society were too limited to allow of its entering on the great question of dental politics, and that the time had come when that question must be vigorously taken up, and a course of political action carefully matured. It further stating that "should a new field of labour be opened up, upon the advice and support of that numerous and influential body known as the provincial practitioners, should be secured. From them we have experienced no apathy; to all our calls they have responded liberally and zealously; boldly, mentally, and pecuniarily they have all been our warm supporters, and from the past we have no fear but that, with their aid, we will accomplish anything that we may ultimately resolve upon taking."

The subject was further brought forward by Mr. Denton Brighton, and was vigorously responded to by several eminent writers. It is, however, to the esteemed and much respected treasurer of our Midland Branch, Mr. Sidney Wormald, to whose honour is due of taking bold and independent action; he who took the responsibility upon his own shoulders, issued circulars, and called a meeting of the whole dental profession. This famous meeting, which was held in Manchester, was presided over by Mr. Charles James Fox, at that time editor of the *Journal of Dental Science*, who for many years had advocated the cause of Dental Reform, and to whom we all owe a deep gratitude.

It was mainly through his exertions that this meeting resulted in the formation of the Dental Reform Committee, which was a representative of the whole profession.

When the work which this committee had been called together to perform, was successfully accomplished under the guidance, and by the great self-sacrifice and hard work of its chairman, Mr.—now Sir John—Tomes, and its active and efficient

secretary, Mr. Smith Turner, it was suggested by Mr. Rymer that a general meeting of the profession should be called publicly, and a resolution submitted to the effect that it was desirable to form a Representative Board under the title of the British Dental Association.

A meeting was subsequently held, which was presided over by Mr. Tomes, at which the British Dental Association was established by the vote of 200 persons, with the Dental Reform Committee for its first Representative Board.

Branches have now been established in various parts of the country, and although there is still no Metropolitan Branch, we hope soon to see one formed, so that the Association may be thoroughly representative of the whole kingdom, and all parts on an equality. These are the lines on which the British Medical Association has achieved its great success. It was at first instituted under the title of the Provincial Medical and Surgical Association, at a meeting held at Worcester, fifty-five years ago, and has now become the British Medical Association, numbering more than eleven thousand members. It has extended to India and the Colonies, and has forty-five branches. Its objects are very similar to those of our Association, its members being under the supervision, and registered by the same general Medical Council, and having an Act of Parliament from which ours was drawn up.

If we wish our Association to succeed, we shall do wisely to enquire into the cause of the success of the British Medical Association, and I think this is not difficult to find. It is thoroughly representative of the whole profession in all parts of the United Kingdom; each branch is entitled to elect one representative member to the Council, and every branch consisting of more than 200 members is entitled to elect an additional member for every complete 200 members of which it consists, London being represented on a perfect equality with the rest of the kingdom.

The Council, which corresponds to our Representative Board, at the present time consists of a president who resides in the provinces, twelve vice-presidents, only one of which resides in London, and representatives from all the branches. The different committees, such as the Journal and Finance Committee, Parliamentary Bills Committee, &c., follow the same rule. Anyone who understands anything about our Association will see at a glance on what a different principle it is worked. Our committees are

made up entirely of members residing in London, and was unattached to any branch. The President of our so-called representative Board is also a London member, and there is even a *solitary* vice-president from the Provinces, and when we come to the Board itself, we find that at the present time it has no less than nineteen representatives, although there are only five in the Metropolitan Branch, and the members of the Association who reside in London very little exceed in number those of the Midland Branch, which is the oldest and most active Branch. At the present time has only four representatives on the board, and no representative on any of the committees.*

I do not bring this subject forward in any fault-finding spirit, nor do I wish to sow dissension and disintegration in our ranks. I know only too well that we are much indebted to those who have brought the Association to its present state of efficiency, and that if any one is to blame it is ourselves, but this in no way relieves us of our responsibility or alters the facts, which I bring forward with the sincere wish that you may be stimulated to give your subject your serious attention during the coming year, and to consider in your own minds whether you think we are doing wisely in proceeding on a unique principle, and the first of its kind that has been established here or elsewhere, and differing so essentially from the plan which has succeeded in the case of the British Medical Association, and which all past experience ought to have taught us to avoid. Our aim should be consolidation, and to avoid anything which can cause disunion or even *tend* to divide us into a London and a provincial party.

The matter rests entirely in our own hands ; we have seen what the British Medical Association has done, and we have seen what has been done in the past amongst ourselves by such men as Mr. Dennant, of Brighton, Mr. McLeod, of Edinburgh, Mr. Rymer, of Croydon, our own hon. secretary, Dr. Waite, and many others.

These men have travelled long distances at great expense of time and money, and have had to work single-handed and against great difficulties and opposition, and have always been to the front in all matters of reform, enforcement of the Dentists Act, and correction and expurgation of the Register.

* Mr. King was probably not aware at the time that the secretaries of the branches have been created ex-officio members of the Business Committee. Ed. J. B. D. A.

If only the mass of the profession will come forward, join the Association, and take an intelligent interest in its welfare, an increased number of courageous and energetic workers will be ready to advance where duty calls, and push forward the work of our great pioneers, so that in a short time our Association may compare favourably with any other, and be in *deed* what it is really in name, the *British Dental Association*.

Let us especially remember the help and assistance we have received from our professional journals in the past, and guard jealously so powerful an agent for good or evil in the future. Unless some effort is made there is a danger that our position will be no better than it was formerly, and much of the hard work of our great men thrown away and their efforts frustrated.

In conclusion, I will take the liberty to quote the last paragraph of Dr. Waite's article on local societies, which appeared in the *British Journal of Dental Science* in the year 1866, and which is as applicable now as when it was written upwards of twenty years ago, although the scene has now changed and the ideal transformed into the real—a transformation which appears natural and simple to the mere looker on, but only those who have been behind the scenes know the cost and the magnitude of the work achieved :

"If 'unity is strength,' let us be strong ; if progress is desirable, let us be progressive. If public respect is essential to the welfare of the profession, let us command it by exhibiting our own respect for our profession and for each other ; and if brotherly love and charity are the greatest Christian virtues, let us cultivate them, so shall we, better fitted for the daily duties we are engaged in, the more faithfully serve our generation, and when we retire be able to hand down to posterity the profession we love in a nobler and worthier condition than we found it."

Mr. H. BLANDY (Nottingham) said he desired to move a vote of thanks to their president for his very able and somewhat historical address. He had gone over a great deal of ground, and a good deal of the paper was extremely interesting. He agreed with the sentiments expressed by the president, and also by Mr. Bullin, and he considered that the L.D.S. degree was an ample qualification for the practising dentist. He also cordially agreed with the latter part of their president's paper, in which he insisted on unity in the British Dental Association, and also of the whole profession. It was with that idea that he joined the Association, and he was compelled to disagree to some extent with their ex-president's paper, if

he understood him rightly to recommend that they should establish themselves from the College of Surgeons, and rejoin the Dental College. He thought that these things had gone in favour with a great many men who had not fully considered the import. They had now, in connection with medical schools, a staff of doctors, and great facilities for teaching dental students, but if they established a dental college purely for the teaching of dentistry, where were they going to get their staff and location? General practitioners in large towns had not the time to devote, nor the information to impart to dental students. The power was possessed by hospitals with engaged staffs, and where a school was attached. Now that they had settled down to their curriculum, it would be a great pity to disturb any man's mind, especially the student's mind, with regard to the present state of things. Since he entered that room he had been informed that the College of Surgeons had been backed up by the British Medical Council in so far that they had given their approval for all surgeons to attend at the Dental Hospital, London, and to be attending three months to take their L.D.S. degree. If that was so, he thought that Association ought to protest against it with the power it possessed.

The PRESIDENT drew the speaker's attention to the fact that it was not the time to discuss that matter.

Mr. BLANDY said that was wrong.

Dr. WALKER suggested that he should wait until he had more information before him.

Mr. BULLIN seconded the motion. He said he was very sorry that his friend Mr. Blandy had referred to his previous address, because he understood it was not etiquette to discuss an address. He understood it was a rigid rule laid down that the address should not be discussed. He had entirely mistaken his remarks, and asked him to read the address over again. He (Mr. Bullin) was not a revolutionist; he was only a man strongly in love with his calling, and he thought that for men who had been behind a druggist's counter for two or three years, and who knew nothing of the elementary principles of dentistry, to go to a college for three months and take a degree, was a gross injustice to a class of men who had studied the matter. Dr. Walker had said that Blandy was wrong, and he was inclined to say Dr. Walker was wrong, if what he had read in the Journal was correct.

Mr. W. H. WAITE put the motion, which was carried by acclamation. The meeting then adjourned for luncheon.

On resuming, the PRESIDENT called for communications, and

Mr. BLANDY opened a discussion on the question, "On what Basis shall Dental Services be rendered at Public Elementary Schools?" He said he was not going to read them a paper, but he thought this was an important question which they ought to think over, and he was merely introducing it in order to hear their opinions. They were all familiar with the work done by Dr. Cunningham and Mr. Fisher, in order to get dental attention for the army and navy. Mr. Fisher had shown by the papers read before the parent association, that both the navy and the country suffered from the regulation which disqualified a boy for the navy if he were deficient in five teeth. If not, then he was taken into the navy, and if at the age of eighteen, when he was to pass as an A.B., he were deficient in five teeth, he was disqualified. He might add that the postal authorities had issued suggestions to their medical officers in different towns to inspect the teeth. He had a friend who was now a post office medical man in Nottingham, and he had sent to him several cases he had rejected already of candidates who had been deficient in teeth. That being so the subject was narrowed down to the question, What shall be done to the children? because it was clear that boys seeking to get into the army or navy must have their teeth attended to from their earliest years. At Cambridge, and he thought in London, it was urged upon them to educate the public to a sense of the importance of their dental organs. A short time ago he was waited upon by the Secretary of the Young Men's Christian Association at Nottingham, and asked if he would give "a talk on the teeth"—there had been gentlemen giving "talks" on other subjects. He thought that was a good opportunity, and he said he would gladly accept that office with a view to carrying out that suggestion of education. But he was placed in this dilemma, the clerk to the School Board took the chair. He told him how anxious they were to get at the children, but the question came back upon one: if the School Board applies to the dentist and says, "Are you going to attend to these children's teeth—some 30,000 or 40,000—free, or are you going to charge a penny, or a shilling, or eighteenpence per head?" It was very clear that the School Board could not spend the ratepayers' money on dental services, and he did not think that dentists were quite prepared to undertake the care of several thousand children's teeth, so that they came to a dead stop when asked for a practical issue of the question. Mr. Fisher sent him a letter, from which he read the following:—

I observe from this month's issue of the Dental Association that you are to hold a meeting of the Midland Branch soon and that you are to introduce for discussion, "On what Basis Dental Services be rendered in Public Elementary Schools." I am glad to see the wording of the question, "On what basis" has always been more or less of a difficulty with me, but I have got the question sufficiently elaborated now. I have left the question behind of ever supplying services to public elementary schools, for many reasons, and not the least is the injustice many dentists would suffer by the strong men always getting the appointments. If you will look in my second paper under the heading of "Board Schools," you will find in the closing lines of the paragraph, "Whoever has the educating of the child ought to be as criminally guilty before the law in neglecting any of its structures." Now that is my watchword or watch-line for the following reasons:—Education is compulsory on all classes, and where the parent is so poor that he cannot supply it, education is given; it is also medical and surgical aid given to the out-door poor where they require it and cannot pay for it; and as I think I have shown it is given to the army, navy and industrial and agricultural schools also. Well! the fight here is to get the direct organisers to place dentistry on a footing with medical surgery is not yet done, though a lot is said about it.

Now if the question ever comes to the front for the elementary schools, it must be somewhat after the following lines, having a clause in the Public Health Acts or the Education Acts to make dental compulsory. Then when the child is present at school the parent says, "Are this child's teeth all right?" The Parent: "I do not know." The Master: "Well! you must give us a line from your dentist if they are as right as can be and in every way healthy." Now if you see, get that to work and you have elementary schools settled, and no favour to any individual or class of dentists. The rising population, always kept under supervision, they will then get educated and cared for their teeth, and provide work for the teeth doctors, instead of being idle teeth makers, and they can all go to their own dentists, just as they do at present to their doctors in the case of epidemic and contagious diseases.

Those were Mr. Fisher's views. Mr. Blandy did not think that he would ever get any government to hold parents criminally liable for neglecting their children's teeth. He wanted them, if they would kindly do so, to take the matter over and discuss it. It was to be brought forward at the Dublin meeting, he believed, by Mr. O'Duffy, from whom he had received a lithographed letter, and who seemed to be in the search of information. It would be a great help to them to know how they were to proceed, so that they might act with unanimity on that question.

Mr. STOREY (Hull), said he unfortunately did not hear the opening of the debate. He supposed they were all more or less interested in that question. It seemed to him that the question was a larger and further reaching one than merely a children's question, and it was one arising every day in their daily practice. In some towns where they were fortunate enough to have dental hospitals the question was dealt with, but still there were a certain number of people willing to pay a certain amount for services rendered, which as they obtained success, in their profession, they were not willing to accept. It seemed to him as far as the attendance of children in public elementary schools was concerned, they might do something in the way of getting at the children as to the care of their teeth. The children would be willing, and many of them would be quite anxious, or rather the parents would be, that their children should be cared for in a proper manner. It seemed to him that an elementary treatise should be prepared and sent round to the teachers in the public schools. Some three or four years ago the master of a country board school came under his care, and eighteen months or two years afterwards he told him that he had had since then conversations with the children on their teeth. As far as government responsibility affecting reform in the matter was concerned, it seemed to him that they were a long way off attaining it.

Mr. WAITE read the following letter from Mr. Gilbert Walker, London.

DEAR SIR,—I shall esteem it a favour if you will introduce to your Midland Branch, British Dental Association, a new gum facing rubber that I have designed, and a specimen of which will probably reach you by the same post. I enclose you a piece of the unvulcanised rubber (placed between glass, as it so readily soils on handling), you will at once see that it is merely a mixture in particles of the ordinary red, white, and pink rubbers, which combination gives a less unnatural appearance in the mouth under saliva than any pink or single uniform colour—indeed in most cases is actually imperceptible. It enables spaces to be left between the necks of the teeth, giving the natural appearance so long desired without showing the offensive red rubber, and being solid and unsolarised may be eased, fitted, and repolished at will. The material is hardly in the market yet, although special machinery is in progress so that it will be shortly, and then the price will be ascertained and published. It has occupied my attention for over three years to get it to its present stage, and just now only small quantities can be made by my own experimental apparatus.

Mr. WAITE then exhibited specimens of the rubber.

Mr. RENSHAW exhibited a set of models, showing the method adopted to bring the central incisor into position.

Mr. PEARSALL (Dublin) showed a rack for exhibiting specimens. Racks of a similar construction are to be used in Dublin Hospital Museum. They are 18 inches by 24 inches, in measurement, and so arranged that the dental specimens on which are enclosed in glass bottles of a uniform size, can be turned round and examined minutely, but not removed from the rack. If any members of that Association wished to send specimens for exhibition, and if they sent them carefully to Dr. Baker at the museum, they would be arranged according to their class. He remarked that the Medical Association had many times visited Dublin, and expressed his opinion that if the Dental Association would follow their example, they would considerably increase their numbers.

Mr. G. BRUNTON (Leeds) exhibited several models of the mouth.

(To be continued.)

Southern Counties Branch.

THE Annual Meeting of this Branch will be held at the Grand Hotel, Southsea Pier, Southsea, on Saturday, June 1st, under the presidentship of Mr. Cornelius-Wheeler, when a gathering of the members is anticipated. Every effort has been made by the president to make the day agreeable and attractive. By his kindness the business of the day will commence at 10 o'clock with an excursion in the steam launch, starting from the Royal Pontoon at the Portsmouth Harbour Station, for a trip to Portsmouth Castle. Luncheon on board will be given by the president. At 1 o'clock the business of the meeting will commence, and papers are expected from Mr. Vanderpant, on "Dental Obligations;" Mr. King on "The Use of the Matrix in Filling Teeth;" and Mr. King on "The Administration of Cocaine in Dentistry;" Mr. G. Cunningham, of Cambridge, will have something to say on a topic he has already so well handled, namely, the necessity of taking care of the teeth of our soldiers and sailors, and we hope his words may not be without effect in a stronghold of the Naval and Military Departments. On the whole, we think

friends in the South are to be congratulated upon the prospect of an attractive and pleasant day, and we venture to hope that the influence of the meeting may prove contagious. Will not Southampton and Bournemouth and other places wake up, and give in their adhesion and support to the work of the Association, through this Branch? Our attention is for the moment attracted to this particular meeting; but we trust the annual meetings of all our branches will be attended by the enrolment of a large number of new members, who have everything to gain and nothing to lose by associating with their professional brethren.

Eastern Counties Branch.

THE Annual Meeting will be held in the Board Room of the General Infirmary, Northampton, on Wednesday, June 27th, H. W. Tracy, L.D.S.Edin., in the chair.

The Annual Dinner will be held at the George Hotel, on Tuesday evening, June 26th, at seven o'clock. By this arrangement members will have only one night instead of two to stay in Northampton. Dinner tickets 7s. 6d. each, without wine.

The following papers will be read: "Retrospect of the year 1887-8," by R. W. White, M.R.C.S., L.D.S.Eng.; "Notes on six cases of Implanted Teeth," by G. Cunningham, B.A.Cantab., D.M.D., L.D.S.Eng.; "Impacted Wisdom Teeth, with Notes on a Case in Practice," by Alex. Kirby, L.D.S.Eng.

Dr. Waite will show Mr. Gilbert Walker's new "Granular Facing Rubber."

The President-elect, Frank Hall, L.D.S.I., cordially invites members and visitors to luncheon at the George Hotel.

As the Association is quite unrepresented at Northampton, members of other branches are earnestly invited to assist this small branch in making a good meeting. Northampton is easy of access to most Midland towns.

W. A. RHODES, *Hon. Sec.*

53, Trumpington Street, Cambridge.

ORIGINAL COMMUNICATIONS.

Anæsthesia.*

BY F. H. WEEKES.

GENTLEMEN,—A short time ago I was invited by my
your president, to read a paper on anæsthetics to your
I then thought it would have been an easy matter to have
something original and interesting on the subject. This,
flection, I found was not the case, so I now am only going
over the main points of the agents most useful for pro
anæsthesia.

The first method of producing unconsciousness I shall
at is braidism. Mesmer, who flourished about a century
may be considered as being the inventor of this art. His
and practice, however, soon became too extravagant for ev
credulous age, and he was finally denounced as an imposi
a Parisian Royal Commission. The subject was next ex
in England, especially by James Braid of Manchester, in 1841.

From his and other experiments it appears that within
narrow limits the mental condition of hypnotism can be i
in many people; that in the hypnotic state the action
highest cerebral centres seems to be suspended, reduci
patient to the condition of an automaton for the time
Analogous to this hypnotic sleep are somnambulism an
lepsy. According to Braid this peculiar condition is b
duced by making the patient look steadily at a glittering
about a foot above the eyes. After a few minutes' steady
ing a profound sleep may be thus induced. During thi
perception of pain is blocked somehow in the higher brain
and surgical operations may be performed without pain.

A few years after Braid had examined hypnotism, Esda
firmed the good reports of it in India. Here he per
numerous operations on Hindus, painlessly, during the h
condition. If only a small portion of what Braid, Esda
many others have written about hypnotism is true, there n
quite enough to render a further examination of the subjec
able. Up to the present time hypnotism has only been p
in a very limited number of cases. People of the nervou
and especially women, are most susceptible to its influence.

* Read before the Midland Branch, at York, May, 1888.

that the old extravagant ideas are abandoned, it seems possible that braidism might be useful for the relief of pain, especially in nervous people suffering from disease of heart or lungs. In such cases it might be preferable to using the ordinary anæsthetics. I have myself seen some examples of total freedom from pain in some minor operations conducted in the hypnotic condition.

Somewhat akin to braidism is the dis-association of higher centres of the brain from the lower nervous system, seen in the cessation of an aching tooth on arrival at the dentist's door. The two great drawbacks to the general use of hypnotism seem to be the uncertainty of its action, and the peculiar state of mind the patient may be left in afterwards. Let us not forget, however, that braidism does exist and that in exceptional cases it may be utilized for producing anæsthesia.

From a dental point of view nitrous oxide is the most important of all the narcotics. I need scarcely mention to members of this society that laughing gas was the first used of modern anæsthetics. The credit of its introduction must be divided between Sir H. Davy, a chemist, and Horace Wells, a dentist, medical men and physiologists having no connection with the early days of nitrous oxide!

The physiological action of this agent has been so minutely investigated of late years, that there remains but little fresh to say about it not perfectly well known to everybody here present. However, I will briefly recapitulate the more important facts concerning nitrous oxide.

In the first place, this gas cannot be decomposed at the temperature of the body. Therefore, it does not set free oxygen for the use of the tissues when circulating in the body. This means that animals breathing only nitrous oxide will after a time die. Nitrous oxide travels in the body dissolved in the blood, or possibly in temporary union with some of the proteids there. My friend, Dr. McNunn, of Wolverhampton, has failed to find any special spectroscopic indication of its union with the hæmoglobin of the red cells. Are the anæsthetic effects of NO_2 the result simply of asphyxia? It used formerly to be thought so, but of late years many differences have been found between the two, and it is now believed that nitrous oxide has a special action directly upon the brain. As the result of that action, certain changes occur in the cerebrum, whereby, among other things, the perception of sensory impressions is interfered

with. The symptoms of pure asphyxia produced by breathing some such gas as nitrogen, or by blocking up the trachea in animals, occupy three stages, according to Mr. Foster. First, dyspnoea, with increase of respiratory movements lasting for about a minute; secondly, a stage of general convulsions beginning about the end of the first minute, and ending early in the second minute; thirdly, the stage of exhaustion, with lingering and drawn inspirations continuing for about three or four minutes, ending in death.

During the first and second stages the pressure in the blood vessels is much increased. In the final stage only is it diminished. Anæsthesia only begins in the last stage of exhaustion, becoming complete just before death.

In nitrous oxide narcosis, the symptoms are somewhat different. The heart's action is quickened at first, especially in healthy people (this happens with all anæsthetics), but afterwards, as unconsciousness begins, the heart beats are unaffected by the gas. Dr. Buxton has examined the pulses of people breathing the gas, by means of the sphygmograph, and he finds that there is no increase of the blood pressure.

Respiration is at first quickened, afterwards slowed, and finally ceases in animals. There are at no time general convulsions. Death in the few recorded cases in man, and always in animals, occurs from failure of respiration, and not of heart. When the case is averted, there are many warnings given, and the danger is easily averted. When the heart fails it does so suddenly, and without warning, hence the greater gravity of such a case. This explains, too, the comparative safety of nitrous oxide, compared with other anæsthetics.

Dr. Buxton has carefully conducted a series of experiments to show that arterial tension is not increased by nitrous oxide. This is of great importance, as it was formerly thought that such an increase did take place.

An increased arterial tension, occurring in a person whose blood vessels were hard and brittle, would cause their rupture, especially in the brain, producing apoplexy. So that we need no longer be afraid of administering gas to patients having diseased arteries, for no pressure will be put upon these vessels. In pure asphyxia you must remember that such increase of tension does exist.

Victor Horsley and Dr. Buxton have examined the blood pressure in animals under the influence of gas, through a trephine hole

skull. They state that the brain becomes much swollen, so as to bulge into the aperture. In simple asphyxia the reverse is the case, the brain receding very much. So that narcosis from pure nitrous oxide differs in many ways from ordinary asphyxia.

It has often been noticed that when two drugs are administered to animals compound results are produced. When the drugs are anæsthetics, the effect is called mixed narcosis. There are several varieties of this mixed narcosis in common use.

1. Morphia given hypodermically before chloroform, lessens the amount to be given of the latter drug. This is a useful combination for operations in the mouth, especially for clearing the gums from stumps. Sensation goes before consciousness, and the patient is able to wash out his mouth, and yet feel no pain.

2. CO₂ and ether will be referred to presently.

3. CO₂ and nitrous oxide. A frog's muscle suspended in an atmosphere of nitrogen can be made to contract, and with each contraction, even in the absence of oxygen, CO₂ is given off. So when a patient is inhaling pure nitrous oxide, he will still continue to exhale CO₂, although in much smaller quantities than when breathing air. Now it is possible to make the patient breathe again this CO₂, together with the nitrous oxide, and unpleasant as the idea is, it is of some practical value, as the mixed narcosis of CO₂ and laughing gas is longer by some seconds than if the latter alone is given.

4. *Gas and ether.*—By passing nitrous oxide through ether, a very small quantity of the latter is absorbed, and again the mixed narcosis is longer by from half to one minute than when gas alone is administered. For dental operations this extra half minute is of the utmost value. Administered by itself or with ether, or CO₂, gas forms a safe, rapid, and pleasant means of inducing narcosis, and should, I think, be more used in general surgery than it is. It can with great advantage replace ether and chloroform for most minor operations. I have myself, by means of gas alone and satisfactorily, opened large abscesses, broken down joint adhesions, and removed small tumours. Probably gas is safer than any other anæsthetic, but several deaths have occurred from its use.

The sources of danger seem to be (1) foreign bodies blocking up the glottis; (2) narcosis of the respiratory centre, and (3) in one case cardiac syncope. For these reasons it is advisable that gas should be administered by a medical man during dental operations. It is hardly fair to expect the dentist to be ready to treat

instantly dangers from the anæsthetic, at a time when all faculties should be devoted to the difficult task of extraction.

A point of some little importance is the careful disinfection of the face-piece and bags after each employment. The exhalation of breath of patients may contain the dreaded tubercle bacillus, and it is conceivable that consumption may be given to patients in this manner.

Chloroform.—There are two methods of administering this drug in use. One consists in holding some porous material saturated with chloroform to the nose. The other plan consists in mixing the chloroform with a known and large quantity of air, prepared for inhalation. The two common modifications of this method are Clover's large balloon bag, containing three grains of chloroform and 1,000 cubic inches of air. This, in my opinion, is the best way of giving the drug, although a cumbersome one.

Junker's machine acts in the same way on a smaller scale. For oral operations, clearing the mouth of stumps, removal of tonsils, &c., it is invaluable. It should be used then with a tube passing into the mouth instead of a mask.

The advantages of chloroform are—its cheapness, small bulk, rapidity of action, and absence of bronchial irritation. Its disadvantages are few, but enormous. It produces an irritation of the stomach, nausea, and it often causes death without the slightest warning, although occasionally there are indications of danger.

I have personally given chloroform about a thousand times without death, and have seen it administered about five hundred times by competent people with two deaths happening. Death usually occurs from failure of respiration; in such a case there is no warning given and rescue is easy. On the other hand the drug may fail in its action. Its action may become feeble, or it may cease suddenly.

The amount of chloroform taken has but little to do with fatal results. The patient is in danger from the very first moment of inhalation. Death has occurred several times when the quantity taken has been less than three grains; on the other hand it is impossible to produce narcosis with this drug, sometimes. I have seen one case when after the inhalation of eight ounces of chloroform, the patient was scarcely affected by it. Chloroform is supposed by many to be absolutely safe for children, but several deaths have been reported from this cause, in children under eleven years of age. Death has frequently happened

chloroform given for very small operations, and especially for teeth extraction.

Ether.—Some ten or twelve years ago, ether was but rarely used in England, chloroform being the favoured drug for major operations. The old American plan of giving ether was to saturate a towel with it, and hold it over the face; given thus, with free admission of air, there used to be great excitement, struggling, and a heavy waste of time, before the patient could be got under its influence. About ten or twelve years ago, Dr. Ormsby of Dublin, an old school-fellow of mine, invented an inhaler, by which the patient was made to inhale ether and his own expired breath, *i.e.*, a mixture of ether and CO_2 . This was said to produce rapid and easy narcosis, and to be fairly free from danger; as soon as this statement was confirmed, and Clover had improved the inhaler, a resolution took place and ether was established as the favourite anæsthetic. This position it still maintains. Ether, however, is not entirely free from danger, as a good many deaths have happened during its use. At the present time, we are not able to give an arithmetical value to its death rate; but it is worth while remembering the enormous number of etherizations that have taken place during the last ten years, and how very seldom we hear of a death occurring from it. Chloroform fatalities are constantly being recorded. Given with Clover's inhaler, ether rarely causes struggling; perhaps not more than once in twenty times. Most anæsthetics are apt to produce vomiting; but the sickness of ether is much less than that due to chloroform. The rapidity with which narcosis can be produced varies somewhat; with Clover's inhaler, it can be brought about in two or three minutes, but this is not so pleasant for the patient as when five or ten are consumed. Atropine given just before the ether diminishes the amount of saliva, mucus, &c., secreted—at least, I am inclined to think so. Interference with respiration is the common source of danger with ether, and this is fortunately very amenable to treatment. Another drawback to ether is its proneness to set up bronchitis in old people.

Spasm of the glottis, causing a choking sensation, is another trouble that often comes on at the beginning of ether narcosis, before the mucous membrane has lost its sensation. One of the best plans to obviate this is to give gas until the patient is asleep, and then to substitute ether for the nitrous oxide. For this purpose there are several instruments made. Their tendency is,

however to be either cumbersome, or else to smell strong of ether. A new apparatus by Hewitt, is, I believe, a good one. We must remember that ether gives off an inflammable vapour liable to explode if brought near naked lights, or actual candles. This explosiveness, together with the rapid manner in which patients emerge from its narcosis, tends to militate against its use in oral operations.

All alcoholics take anæsthetics badly, and my own idea is that patients should not take alcohol before the operation, as it increases excitement and vomiting. Chloroform is, however, an exception to this rule.

A curious thing I have not seen mentioned in books is the existence of a primary sleep, into which patients often fall when ether is used. From this they can be conducted into a state of narcosis, or by bad management into a state of struggling and coughing.

After the operation is over, it is cruel to awaken patients roughly. Very often pleasant dreams are being indulged in, and to be roused from them by being told "it is all over," is a painful drop from the sublime to the disagreeable. As regards the comparative safety of anæsthetics, I agree with a statement of John Hutchinson, who said "that he would take gas from any quack person, ether only from a skilled administrator; and that no living should ever give him chloroform."

The same dangers, requiring the same treatment, may occur when using any anæsthetic. When respiration flags to any extent, artificial respiration must be started at once; and in my mind Sylvester's plan is the best. Cardiac failure is much more grave than the preceding. If chloroform is being given, it must at once be changed for ether. If ether is being used, prevent pain from being felt, either by stopping the operation, or by keeping up full narcosis. Pain acts reflexly and weakens the heart. Should the pulse cease, artificial respiration should be formed, so as to get rid of chloroform vapour from the blood.

Cocaine.—Cocaine has given such magnificent results in general surgery as a local anæsthetic, that equally splendid effects are expected from its use in dental work. However, its success, although marked, has not been nearly so great as in other operations. According to Truman, if applied to the exposed pulp of a tooth, cocaine removes sensation where it is in contact. In a hypodermically deep down, it diminishes the pain of extra

and applied to the gums, it prevents the grasping of the forceps from being felt.

The main points about cocaine seem to be the necessity for its being placed in contact with the nerves to be rendered insensitive; its inability to penetrate skin or bone by soakage; the development of toxic qualities, if much above half a grain is injected, often producing syncope and giddiness; its uselessness in inflamed tissues crowded with leucocytes, and the necessity for using freshly-made solutions of the drug.

Fifty years ago we did not possess any anæsthetic, at the present time we do not possess a perfect one. Is it too much to expect that the chemistry of the next fifty years will provide us with one that will be extensive, safe and pleasant?

REPORTS OF SOCIETIES AND OTHER MEETINGS.

General Medical Council.

May 24th.

MR. MARSHALL, President, in the chair.

Report by the Dental Committee on the case of George Thomas Ockleford Crocker was considered. Mr. Muir Mackenzie and Mr. Farrer attended as legal advisers to the Council.

MR. FARRER: This is a case relating to George Thomas Ockleford Crocker, whose name is on the Dentists' Register by virtue of two qualifications, one as having practised before the 22nd of July, 1878, and secondly, he has had a later qualification granted him by the Faculty of Physicians and Surgeons of Glasgow. On the 7th of May, 1888, the Faculty of Physicians and Surgeons of Glasgow passed a resolution that Crocker's name should be erased from the list of the Faculty's Licentiates in Dental Surgery because he had violated the obligation in the declaration which he subscribed on admission, that he would not advertise or employ any other unprofessional modes of attracting business. Notice of this was given in the usual way to this Council, and the facts were submitted to the Dental Committee, and this is the report of the Dental Committee which contains the whole facts very shortly:—

(a) The name of George Thomas Ockleford Crocker was placed on the *Dentists' Register* on October 2, 1878, as "In practice before July

22, 1878," and, on January 28, 1880, there was added in the Register the Qualification of "Lic. Den. Surg. Fac. Phys. Surg. Glas. 1880."

(b) On May 7, 1888, the Faculty of Physicians and Surgeons of Glasgow resolved that the name of Mr. Crocker be, and thereby, erased from the list of the Faculty's Licentiates in Dental Surgery, in respect that he had violated the obligation in the Declaration which he subscribed on admission, that he would not "admit or employ any other unprofessional modes of attracting business."

(c) That, by the erasure of Mr. Crocker's name from the list of Dental Licentiates of the Faculty of Physicians and Surgeons of Glasgow, his Licence from that Faculty has been cancelled.

(d) That, from a communication addressed to the Solicitor-General Medical Council by the Secretary of the Faculty of Physicians and Surgeons of Glasgow, it appears that subsequently to the Motion to strike the name of Mr. Crocker off the list of Licentiates in Dental Surgery being laid on the table of the Faculty, two attempts were made to communicate with Mr. Crocker by registered letters addressed to him at both his addresses in Oxford Street, Manchester, but both attempts were frustrated by Mr. Crocker personally refusing to accept delivery of the letters, previous attempts to communicate with him having been similarly treated.

The case therefore resolves itself simply into one of the questions often have before us, of directing the Registrar to make the Register correct by removing the one qualification that has been withdrawn. It is not like Partridge's case, where the whole of the qualifications being withdrawn we had to go into the consideration of the case to see whether his name ought to be struck off or not. This is no case of taking the name off, but simply a case of registering the fact that the Faculty of Physicians and Surgeons of Glasgow have withdrawn the qualification that was granted to him. His name will remain on the Register, but the qualification ought to be withdrawn.

The PRESIDENT: The motion I have to put from the chair is the following: "That the qualifications of Licentiate in Dental Surgery of the Faculty of Physicians and Surgeons of Glasgow be appended to the name of George Thomas Ockleford Crocker, and be erased from the *Dentists' Register*."

The resolution was agreed to.

Saturday, May 26th.

Mr. MARSHALL, President, in the chair.

DENTAL BUSINESS.

The Rev. Dr. HAUGHTON said that his attention had been called by a very high class of dental practitioners and surgeons

Dublin to the opinion which they held that there could be no better mode of commencing medical study where defined as apprenticeship under a medical practitioner, or attending a public medical institution. In addition to that he wished to propose "That the certificate produced by a student of having entered and paid fees at a Dental Hospital which has on its working staff not less than three registered medical practitioners shall be accepted as evidence of the commencement of medical study as a medical student, and that the Registrar shall, on production of such certificate, together with that of having passed the Preliminary Examination, enter the name of such student on the *Medical Students' Register*." In all well-conducted Dental Hospitals the students learned a considerable amount of anatomy, as, for example, the anatomy of the fifth pair of nerves, and the anatomy of the head and face. They also had the opportunity of learning a good deal of minor surgery, and he thought that that kind of practice and instruction might be regarded as a *bonâ fide* commencement of medical education quite as good as that of going under a medical practitioner. He would simply move the resolution.

Sir WILLIAM TURNER : I venture to think that this motion is quite unnecessary, because any student can, at present, commence medical study on the certificate of a registered medical practitioner. I think I am right in saying that that is one of the modes specified.

The REGISTRAR : Yes, it is supposed to be included in pupilage.

Sir WILLIAM TURNER : That is that any student who has passed a preliminary examination can have his period of study dated from the time when he presents to the Registrar his certificate of having passed that examination along with the certificate from a registered medical practitioner that he is his pupil, so that any one of these three gentlemen acting as officers to any Dental Hospital can, without any further resolution on the part of the Council, certify that A. B. has begun his medical study, supposing that he has passed a preliminary examination. Therefore, I do not think that this resolution is necessary.

The PRESIDENT : Do you wish to press it, Dr. Haughton ?

The Rev. Dr. HAUGHTON : No, not under the circumstances, I will ask permission to withdraw it.

Sir JOHN SIMON : I wish to enter a *caveat* against the acceptance of the doctrine that any one of these three gentlemen can certify that a student has begun his medical study.

Sir WILLIAM TURNER: It is a law of the Council. Any of these three registered medical practitioners acting as a medical officer to a Dental Hospital in giving instruction in the Hospital on some subject bearing upon medical education; he is giving instruction, for example, in dental anatomy, and dental physiology to his pupils.

The Rev. Dr. HAUGHTON: We have no pupils in Ireland in the same sense as in England.

Sir WILLIAM TURNER: The practitioner can make the student his pupil.

The Rev. Dr. HAUGHTON: The institution of pupils does not exist in Ireland.

The PRESIDENT: It is stated that the certificate can be given by a master, a teacher, or an officer of a medical school.

Rev. Dr. HOUGHTON: It would be forcing us to introduce a system which we do not possess.

Sir JOHN SIMON: The contention appears to be that the certificate means medical, but I think that medical and dental are distinguished from one another. I admit that the question has been before us, and that we have perhaps tacitly acted upon the assumption that medical excludes dental. We have, perhaps, proceeded on the assumption unguardedly; but I certainly think that we ought not in the interests of medical education to accept the doctrine that a man's being sent for a year to a dental hospital shall be taken as equivalent to receiving a year's medical education. I am not prepared to accept that and I think perhaps Dr. Houghton will hardly press it.

Rev. Dr. HOUGHTON: I have asked leave to withdraw the motion.

Sir JOHN SIMON: I merely wish to have my *caveat* entered against the view that was expressed.

Permission to withdraw the motion was then given.

Mr. BRUDENELL CARTER brought forward the following resolution of motion:—"To call attention to an advertisement issued by H. F. Partridge; and to the names of certain registered medical practitioners appended thereto; with a view to action being taken in the case by the Bodies from which these gentlemen derive their qualifications." He said he thought it might be useful if the resolution were called to what had been actually done with regard to Mr. Partridge. It would be within the recollection of the Council that at its last meeting, it ordered the registrar to erase from

Dental Register the name of Mr. A. S. Partridge, who had issued an advertisement, to which he need not further refer. A few days ago, there was put into his letter box in an envelope, an advertisement still issued by Mr. Partridge, very much on the same lines as the advertisements that were before the Council. He still called himself L.D.S., placing after those letters the words "Royal College of Surgeons;" and then followed, "under the patronage and recommendation of the following," mentioning several names of ladies, bishops and others, including the names of seven registered medical practitioners all of whom were well known to many of the Council and as gentlemen of eminent position. He had not read the names, as he did not think it desirable that they should appear in the reports of the journals. He presumed that it was right to suppose that those gentlemen were ignorant of the use made of their names, and that they were not really patronizing or recommending such a person as Mr. Partridge; but if by chance they were doing so they would be committing an offence of which the bodies from which they had received their qualifications might well take cognizance. It appeared to him that if the representatives of those Bodies present at the Council would call their attention to the advertisement, in all probability the gentlemen in question would be applied to by the Authorities, and would have the opportunity of clearing themselves from the imputation made upon them or taking such action as they might deem desirable. He should be happy to find any motion upon the notice he had given, but he thought that his object would be equally obtained by simply calling attention to the facts of the case.

Sir DYCE DUCKWORTH said it appeared that there was no Licentiate of the College of Physicians of London in the list of names referred to. If there had been, he should have called the attention of the College to the fact in order that the gentleman might be summoned.

The PRESIDENT: You think it will be sufficient to call the attention of the Council to the subject?

Mr. BRUDENELL CARTER: That will probably fulfil the object I have in view.

The PRESIDENT: Perhaps you will leave out the last words of the notice, "With a view to action being taken in the case by the Bodies from which these gentlemen derive their qualifications;" because those words rather seemed to insinuate that they would

not take action. If the notification appears in the proceedings calling attention to the subject, I think it will be sufficient.

Mr. BRUDENELL CARTER : Quite so.

The PRESIDENT : Then the two last lines will be struck out when the notice is placed on our Minutes.

Odontological Society of Great Britain.

THE ordinary monthly meeting was held on June 4th at the Society's Rooms. Mr. Daniel Corbett, M.R.C.S., L.D.S., President, in the chair. A good attendance of members and several visitors were present. The minutes of the preceding meeting being read and confirmed, the PRESIDENT called upon Dr. St. George Elliot for his casual communication.

Dr. ST. GEORGE ELLIOT said Capsicum had been used advantageously in the treatment of periodontal inflammations for some time. He had employed capsicum plasters with success, but recently he had discovered that he could himself make the plasters far better, and at a more reduced cost, than they could be obtained in the market. He employed wash leather and chamois, which he soaked in the tincture of capsicum, adding a ten per cent. of tincture of cantharides. The plasters were then punched out of the leather. He had found this preparation to answer better than aconite or iodine.

The PRESIDENT then called upon Mr. Van Praagh for his communication on "Defective Articulation the Result of Cleft Palate."

Mr. VAN PRAAGH said : Painfully defective articulation, amounting in some cases to unintelligible speech, occurred even after surgical operation, and the use of dental appliances for the relief of cleft palate. Scientific and judicious treatment of these sufferers, directed towards their training in articulation, remedied this unfortunate defect. The degrees of defective articulation vary ; the remedies requisite to produce intelligent enunciation were, firstly, to correct defective breathing, the air blast must be forcibly expelled from the mouth cavity instead of through the nose. Mr. Van Praagh recommends vocal gymnastic practices ; the patient learns to move his lower jaw and tongue in particular ways ; abdominal breathing is also practised ; breathing through the mouth when widely open, and the tongue pressed down with a spatula is also advised. Self practice before a looking-glass is

recommended as enabling the patient to acquire control over facial contortions otherwise unwittingly indulged in. Besides faulty production of single letters, *e.g.*, "t," "k," "s," and "l," the subjects of cleft palate exhibit general slurring of whole words; slowness of speech requires to be inculcated, and a general training of the ear, so that the patient may appreciate his own deficiencies, as often he fails in so doing. The training in the recognised laws of elocution and production of voice were finally insisted on as being of the greatest importance.

The PRESIDENT said that dentists having done their best by producing mechanical contrivances for the filling up of clefts, would of course be glad of the scientific principles to which Mr. Van Praagh had referred; although he believed that faulty pronunciation, such as twang, could be cured by the methods suggested, he doubted very much whether any system of gymnastics or rules of elocution would profit, unless the dentist had been appealed to, in the first instance, to remedy the physical malformation. After-treatment by instruction in elocution would of course be efficacious. As Mr. Van Praagh had addressed himself to this point he felt the Society was obliged to him for his valuable paper.

Mr. HENRI WEISS said he had met with many cases of persons wearing obturators, and sometimes the speech was little, if at all improved; it had been his practice to recommend their studying elocution if they had not already done so before he undertook to supply a fresh obturator. He had had a case recently under treatment which had borne out the wisdom of this practice.

Mr. WALTER COFFIN said those who had written upon the mechanism of speech had pointed out that various persons produced similar sounds in different ways, by, for example, approximating different portions of the tongue or teeth, or other agents in sound production. This accounted for what he had often noticed, *viz.*, that those who wear obturators at first speak less clearly than before the mechanical contrivance was adopted. They were unable to produce the sounds in the old way, and had to be taught the new way. He thought dentists must recognise that their responsibility did not end when they had executed a satisfactory obturator, but should enforce upon their patients the necessity for the assistance of an elocutionist and the study of speech.

The PRESIDENT could not endorse one observation of Mr. Coffin's, so far from never having seen a case in which the effect of wearing

an obturator had not magnified the imperfection of speech, he (the President) had never yet met with a person whose speech was not at once benefited in some degree by the adoption of an obturator.

Mr. COFFIN submitted that the authorities did not bear out the President's experience, for it had been shown that in the case of persons who had passed to adult life without wearing an obturator, and who had to a certain extent overcome their impediment by elocutionary methods, were the least benefited by a subsequent adoption of an obturator.

The PRESIDENT believed that the explanation must be that the obturators in question were of faulty construction.

Mr. HERN asked how far staphyloraphy assisted Mr. Van Praagh in his treatment of cases, and what effect his system of gymnastics had upon those who had been subjected to this operative treatment.

Dr. MITCHELL endorsed Mr. Coffin's statements. Staphyloraphy he believed only does what a well-fitting obturator is able to effect.

Dr. ELLIOT thought that as there were two distinct forms of cleft palate, the congenital and the accidental, the difference in treatment of two varieties should be kept in view. In the last case the patient spoke correctly as soon as the cleft was filled. In the first the patients have never known how to talk correctly, and so they require education in that particular, after an application of an obturator.

Mr. VAN PRAAGH having briefly replied and mentioned that staphyloraphy was not in all cases successful, the President called upon Mr. F. F. BURGHARD to read his paper "On some Cases of Epulis." He narrated the particulars of three cases. In the first, the patient, a woman aged thirty-three, had noticed a small lump upon the outer surface of the lower jaw, opposite the left canine tooth, which was at first quite soft in consistence. Within three months of its first appearance it began to bleed, which it did whenever the surface of the tumour was pressed against, as by solid food. An unusually severe attack of hæmorrhage led the patient to seek advice three years after the tumour first appeared. Examination revealed a tumour as large as a horse bean, situated below the left lateral incisor, canine and first bicuspid of the lower jaw. It was dark purple in colour, soft and compressible. At one spot there were deeply congested granulations, elsewhere the surface

was rough and warty. It was pedunculated. Fuming nitric acid was applied freely over the tumour. The tumour sloughed away with the exception of a portion which bled so freely that its removal by means of Paquelin's cautery was necessary. Limited superficial necrosis followed. The second case was that of a woman, aged twenty-nine. In September, 1887, she applied for relief. There was a small warty-looking tumour just below the left first bicusped tooth on the outer surface of the lower jaw. The growth had been present for eighteen months, and had given rise to trouble by bleeding; it was the size of a large pea, dark bluish in colour, soft and compressible, finely papillated on the surface, the papillæ bleeding if roughly touched. In this case, as in the last, no connection with a tooth could be discovered. After removal by the knife, it was found upon microscopic section to consist of hypertrophied papillæ upon a ground work of fine fibrous tissue, in which were large vascular thin-walled channels. This nævoid condition was not universally present. No recurrence occurred. In the third case, there was a soft bluish coloured tumour upon the right upper jaw, opposite the canine tooth, of two months' growth, and of the size of a small bean. It was not connected with a tooth. Upon removal with the knife profuse hæmorrhage occurred. Microscopic section showed the growth to consist of fibrous tissue channelled by dilated thin-walled blood vessels.

After referring to the cases quoted by Mr. Salter, Mr. Burghard pointed out that in the cases he cited, no connection between the tumour and the teeth or bone existed, so that the removal of a portion of bone advocated by Mr. Salter was unnecessary. The structure of the tumours appeared to the author of the paper to justify him in classing them with the vascular papillomata found upon the lip. He considered the best means of removing them was to cut freely of the growth down to the periosteum; when this is done the hæmorrhage is not severe. In conclusion, a case of epulis which underwent epitheliomatous change, was recorded. The patient, aged fifty-six, was seen in 1884, and then suffered from a typical fibrous epulis, situated on the outer surface of the lower jaw, opposite the right canine tooth. The tooth had been broken by a blow and constantly ached. The man was a great smoker of short clay pipes, and complained that the tumour got in the way of his pipe and was rendered sore by it. In 1887, he was admitted into Guy's, suffering from epithelioma involving

the lower jaw, an epitheliomatous ulcer occupying the site of the epulis.

Mr. HENRI WEISS said that a similar case had occurred in his practice, a vascular growth, the size of an ordinary raspberry opposite the first upper molar on the right side. Mr. Weiss removed it, but it recurred ; severe hæmorrhage attended the operation. He again removed it by the aid of caustic potash, without recurrence. He was inclined to attribute the growth to the irritation set up by tartar.

Mr. WEST had seen a similar case of a vascular growth, opposite the first bicuspid on the right side of the lower jaw ; the central and lateral incisors were removed and the tumour cut away, its base being treated with nitrate of silver ; recurrence took place, and the right canine and a portion of the jaw were then excised. A satisfactory result followed. Referring to the sarcomatous nature of many epulides, he quoted a case of a large tumour which he had found at the root of a tooth and removed ; it turned out to contain spindle cells.

Dr. ELLIOT deprecated the use of a knife in these cases ; he had reported some cases in which he had applied ethylate of sodium to epulides with striking success. In reply to a question by Mr. Coffin, he said that the ethylate of sodium possessed the advantage of being less painful when applied than caustic soda.

Mr. BURGHARD, in reply, said that although ethylate of sodium might be useful in certain stages of epulis growth, statistics certainly showed that free excision was the only reliable treatment.

The PRESIDENT said that owing to the lateness of the hour it would be necessary to defer the reading of Dr. Mitchell's paper. It was accordingly postponed to the December meeting.

The usual votes of thanks having been taken, the PRESIDENT announced that the Society was adjourned until November, when papers would be read by Messrs. Gaddes and F. J. Bennett.

The Dental Hospital of Exeter.

ANNUAL MEETING AT THE NEW PREMISES.

THE eighth annual meeting of the subscribers to the Dental Hospital of Exeter was held on the 25th May at the new premises in Castle Street, a two-storeyed building having on the ground

floor a waiting room and general operating room, and above a room for operations under anæsthetics and a well-lighted stopping room. The President of the Hospital (Mr. W. Horton Ellis) was in the chair, and there also attended the Right Worshipful the Mayor of Exeter (C. T. K. Roberts, Esq.), and the Mayoress, Sir Stafford Northcote, Bart., M.P., and Lady Northcote, Mrs. W. Horton Ellis, Colonel Freemantle, C.B., the Rev. Dr. Dangar, the Rev. F. Sterry, the Rev. W. G. Mallett, Drs. Blomfield, J. Woodman, Henderson, and Messrs. W. Pring, F. Townsend, Bevan-Fox, Browne-Mason, Ackland, Garland, W. May (Hon. Sec.), and G. Franklin. Letters of apology regretting their inability to attend were received from the Lord Bishop of London, Sir John and Lady Shelley, Admiral White, C.B., and others.

The PRESIDENT, in opening the proceedings, said the institution was started between eight and nine years ago by the Mayor and Bishop of Exeter for the time, and since then every succeeding mayor and the bishop had taken an active interest in it. The Lord Bishop of London and Mrs. Temple took a deep interest in its welfare, and were life governors of it. The special reason for which they were asked to assemble that day was in order that they might see the new place where the Dental Hospital had taken up its abode. He thought they would agree that the new abode was an exceedingly good one. A great deal of money had been spent upon it, in order to adapt it to the requirements of the institution, and he had no doubt that when the public became fully acquainted with its usefulness they would more liberally subscribe to its support. During its existence no less than 50,000 cases had been attended to through its means, and so good a result of the working would compare most favourably indeed with any other institution of a similar kind in the country.

Mr. MAY, the Hon. Secretary, read the annual report as follows :—“The Committee of Management have pleasure in presenting their eighth annual report to the governors of the Dental Hospital. The report of the Medical Sub-Committee which follows shows that in the past year over 6,000 cases have received attention ; these numbers have only been once exceeded since the opening of the institution. The Committee gratefully acknowledge a life governor's donation from Mrs. Gard, and a subscription of £10 10s. from the Hospital Saturday Fund. Having to vacate the old premises in Bedford Circus, it became necessary to seek other accommodation, and the Committee consider themselves fortunate

in securing new ones in Castle Street, belonging to Mrs. Gard; they have proved more commodious than the former ones, and provide a special room for the administration of anæsthetics, the want of which was previously much felt. The Committee regret that there is a falling off in the annual subscriptions, more especially as, owing to its having become necessary to find fresh premises, considerable expense has been incurred in adapting them to the requirements of the institution, and they earnestly appeal to the public for a generous support to meet the outlay. They regret to say that they have lost the services of Mr. A. C. Roper, who has resigned the post of surgeon-administrator of anæsthetics, and they wish to express their sense of the great value his attendance in that capacity has been to the patients of the Dental Hospital. The Committee recommend the re-election of the President, Mr. William Horton Ellis; of the retiring members of the Committee of Management, Messrs. George Franklin, the Rev. W. G. Mallett, and Richard Ley; and of the Hon. Treasurer, Mr. F. Townsend. The Committee would close with an expression of their thanks to the staff of the Hospital and to the hon. auditors for their services. The Medical Sub-Committee have to report that during the past year 3,863 patients were admitted to the Dental Hospital, and 6,138 operations performed. The Committee have again to report an increase in the number of cases treated, the number having only once been exceeded since the opening of the institution. They would also point with gratification to the proportion of stoppings to extractions, which is very large indeed, and compares most favourably with similar institutions elsewhere. The Committee wish to add the expression of their own regret to that of the Committee of Management at the resignation of Mr. A. C. Roper."

The MAYOR moved the adoption of the report, which spoke for itself, and he could not help thinking that it was a most satisfactory one. He congratulated the institution upon their move into these premises. The position was, perhaps, hardly so central as the old premises, but the new building was certainly much more commodious and much more cheerful in its internal appearance. This latter feature was, he thought, a great one in such an institution as this. People generally came with dread to a dental hospital, and the least that those connected with it could do was to make the interior as cheerful as was possible so as to alleviate in some measure the sufferings of those who entered the building to undergo

operations. In the report, the Committee closed with an expression of their thanks to the staff of the Hospital, and one ought, in moving the adoption of the report, to add to that testimony and to state how much the institution is indebted to the medical and surgical staff. If they did not give their services it would be impossible for such an institution as this to be carried on. They all knew the large amount of gratuitous work which was done by gentlemen of the medical and dental professions, and on occasions of this sort the least they could do was to show how heartily they appreciated and acknowledged the skilful and honorary services which they were so kind as to render in aid of suffering humanity.

Sir STAFFORD NORTHCOTE said it gave him the greatest possible pleasure to second the adoption of the report which had just been proposed to them by their worthy Mayor. He should like also to say that it was with great pleasure that he heard Mr. Ellis's account of the good work which this Hospital had done, his reference to the commodious premises which they had entered, and the testimony which he bore, and which the report endorsed, to the value of the institution. Mr. Ellis's natural modesty prevented him from saying that in no small part the success of this Hospital was due to the fact that so esteemed and public-spirited a citizen as himself had been for so many years President of the Dental Hospital, and that his services in that capacity had been so well backed up by such well-known citizens as Mr. Franklin, the Rev. Mr. Mallett, Mr. Ley and Mr. Townsend, whose services in connection with all social enterprises in Exeter were so well known and so much appreciated. He should like to add his expression of confidence in the staff of the Hospital, and his belief that the subscribers would unanimously adopt the Mayor's suggestion that they should thank them most cordially for their most valuable services. He sympathised fully with what fell from the Mayor as to the necessity of making the Hospital as cheerful internally as possible. He saw an old friend of his in the room, who told him he had come to the meeting as a mark of his own satisfaction at never having had an occasion to trouble the Dental Hospital in any way himself, and he (Sir Stafford) confessed that it was like the foreign history of countries—a matter about which, when a man was able to say little, that was the happiest thing he could have to say. The report said how many cases had been treated during the past year, and that, he thought, shewed an increasing confidence of the public of Exeter

in the administration of this Hospital, as well as unfortunately, the great necessity which existed for institutions of this kind. While the financial condition of the Hospital was fair, yet still he understood from the remarks made by Mr. Ellis, that its income had to some extent fallen off. If he might venture upon so professional a remark, he would say that the income appeared to be somewhat under the influence of anæsthetics. There was this resemblance between the income of the Hospital and the operations performed there—that there was an increased number of stoppings. He trusted most sincerely that in answer to the appeal which Mr. Ellis had made they would find that they would be able to enter upon a successful process of extraction with regard to the necessary guineas to pay off the debt which had been incurred in consequence of the change to these new premises. He hoped some of the citizens of Exeter might be disposed to follow the example of Mrs. Gard and others, and at all events be induced to become governors of this institution. When, later in the year, his friend Mr. Townsend made a special appeal for something towards clearing off the debt incurred upon moving into these premises, he only hoped his friend would remember that he need only be written to and he should be happy to do his part.

The reports were then unanimously adopted.

Colonel FREMANTLE moved that Mr. G. Franklin and Mr. W. S. Mortimore should be re-elected honorary auditors of the institution, with the best thanks of the meeting for their past services, which was carried unanimously.

On the motion of the Rev. Dr. DANGAR, seconded by Mr. G. FRANKLIN, a hearty vote of thanks was accorded to the President of the institution.

Mr. Fox moved that a similar compliment should be paid to the member for the city and Lady Northcote for their attendance that day, and incidentally remarked that he was glad the military authorities were represented at the meeting, because the institution did a good work for the soldiers stationed at the place. He had himself come across cases where young men had lost all or many of their teeth, where these could have been preserved had earlier attention been given to them. He could not help thinking that it would be a very desirable thing if a dentist could be attached to the military medical staff.

The motion was carried by acclamation, and, replying, Sir STAFFORD NORTHCOTE said his eloquence had moved Lady North-

cote so much that she had expressed her wish to become a governor of the Hospital. On her behalf and on his own he thanked them for their kindness, and he with pleasure accepted the invitation of Mr. Ellis to accompany them in an inspection of the new premises on the honourable understanding that he should not thereby be called upon to furnish a specimen to their museum.

MINOR NOTICES AND CRITICAL ABSTRACTS.

Eskell versus Gibbs.

AT Marlborough Street Police Court, John Arthur Gibbs, thirty-four, well dressed and described as a surgeon dentist, of Cunningham Road, Shepherd's Bush, was charged with embezzling £5 5s., received by him on account of his employers, Messrs. Isidore and Ruby Clifford, who carried on business as Eskell and Webb, at 128, New Bond Street. Mr. Arthur Newton, solicitor, prosecuted; and Mr. Bernard Abrahams conducted the defence. The evidence called on behalf of the prosecution was to the effect that the defendant entered the employment of the prosecutors as manager on the 16th of last September at a salary of £5 a week. On February 1 an arrangement was entered into with him for taking over the business, and an agreement was drawn up in writing. It was afterwards discovered that on January 25 the prisoner had omitted to account for £5 5s. which he had been paid by a Mrs. Hearnden, and when spoken to about the matter he said that he knew nothing whatever of it, and if he were given into custody should have good ground on which to found an action. Subsequently it was discovered that he had not entered in the day-book £21 received from a Miss Green, and when told that an explanation must be given or he would be given into custody, he became abusive. The defendant was a licentiate of the Royal College of Surgeons, and under the agreement of February 1 was to take over the business and use the name of the firm, and for that privilege was to pay the prosecutors £5 a week, and if the annual receipts exceeded £1,500 a year, he was to hand to Messrs. Clifford a fourth part of any money received above that sum. On May 2 notice to terminate the agreement was given to the defendant, and subsequently the prosecutors received information which resulted in the arrest of Gibbs. About

a fortnight ago another arrangement was entered into, to the effect that the defendant should go to St. James's Street, where Messrs. Clifford had another business establishment, and receive a salary of £6 a week, from which £1 weekly was to be deducted until certain outstanding debts due by Gibbs were paid off. Mr. Abrahams, for the defence, said he should rely upon this last agreement as showing that it was understood and acknowledged that the money in question was merely a debt, and was treated as such by the prosecutors. The magistrate remanded the defendant till Tuesday, allowing bail in two sureties of £75 each.—*Times*, June 12th.

NEW INVENTION.

A New Gum Facing Rubber.

BY GILBERT WALKER, L.D.S.ENG.

HAVING received so many enquiries respecting this new rubber facing, since it was seen at the Odontological Society in April last, and subsequent dental meetings, the insertion in your Journal of the following brief account may satisfy the interest taken, flattering as that is to myself.

It occurred to me some years back, that could a multi-coloured rubber be produced, of a fairly natural shade, it would represent the natural gums far more faithfully than any uniformly coloured "pink" ever could do, and I commenced experiments to determine the possibility of producing such a combination of colours as might serve the purpose. For a long time my efforts were unavailing, for, although I could get colours, I could not get effect, until the happy thought struck me of arranging a mechanical cutting machine that would intermingle the coloured rubbers *in fine particles*, producing a granular gum that is a nearer approach to nature than any other rubber I have ever seen, and in most cases in the mouth, when covered with saliva, is simply indiscernible.

I do not pretend that it is the colour of the gums, like the beautiful "continuous gum work," it is merely a good imitation in effect, by its light and shade, and granular, multi-coloured surface, and resembling the gums much after the same manner that an artist represents a *black* boot with dashes of *white* paint for high-lights.

A very extended series of experiments as to the varying proportions required of various makers' rubbers has led to the production of the cases exhibited, which were composed of the red, white, and pink rubbers of different manufacturers.

All detailed information is kindly volunteered by Mr. W. H. Waite, of Liverpool.

ANNOTATIONS.

THE plan for exhibiting small specimens with the greatest economy of space, and at the same time with the greatest facilities for careful examination, which has been devised by the Museum Committee in Dublin, is so excessively ingenious that we think it will very likely become popular in all museums where it may be desirable to show small objects. It consists of a mahogany bottle rack or frame in which two rows of bottles of the nature of Wolrab's gold bottles, are inserted in sockets so that they can be seen from both sides and turned round if necessary, but cannot be withdrawn; the specimen being held up on the end of a wire which is inserted into the cork of the bottle. This arrangement not only ensures the perfect safety of all the specimens, and at the same time offers the best opportunity to visitors of thoroughly inspecting them, but possesses the additional advantage that the racks can be easily packed like drawers in a suitable chest—a fact that any lecturer will appreciate. The arrangement will especially lend itself to the exhibition of various systems of pivoting and crown work. Members who prefer to mount their own specimens can obtain the regulation bottles of Messrs. Pellatt & Co., 17, St. Bride Street, Ludgate Circus.

THE last day for receiving specimens for the annual museum will be the 22nd of July. Members are requested to be as early as possible in dispatching their contributions.

It is of great importance that those who intend crossing the Irish Channel should send their names in at once to the Irish secretary, because if Mr. Pearsall is in possession of the necessary facts about numbers *sufficiently early*, it is not impossible that an arrangement may be effected with the railway company by which

a material reduction of the railway fares may be agreed to. It is, however, essential that members should co-operate to the small extent of stating their intentions.

AN Art Exhibition is almost a looked-for accompaniment of a museum. The announcement that such an exhibition will be one of the attractions of the Dublin meeting will therefore occasion no surprise. Any of our members who may be the happy possessors of pictures, and willing to lend them, will confer a favour if they will kindly send their names as soon as possible to Mr. George Parkinson, 36, Sackville Street, W.

WE are requested to acknowledge, on behalf of the Irish Branch, the receipt of specimens from Sir Edwin Saunders, J. Smith Turner, Charles Wall, A. Howarth, Charles Rippon, R. T. Stack, R. H. Moore, G. M. P. Murray, D. Corbett, D. Cuscaden, Samuel Smyth, W. B. Pearsall, A. W. W. Baker, the Dental Hospital of Ireland, for Annual Museum.

IN response to a request from the Museum Committee in Dublin, the Council of the Odontological Society have agreed to send a loan collection from the Museum of that Society for exhibition.

WE are pleased to notice that Dr. Theodore Stack, of Dublin, has been elected on the Council of the Royal College of Surgeons in Ireland. Dr. Stack is a prominent member of the Irish Branch of the Association, and his election is an encouragement to the Branch and a well deserved compliment to the profession in general.

WE venture specially to call the attention of our members to the Annual Meeting of the Eastern Counties Branch, which will be held at Northampton on Wednesday, the 27th of June. The Branch is unrepresented at Northampton, and it is therefore all the more desirable that the meeting should be well attended, in order that a good effect may be produced. The Branch being a small one, and having no element of strength in the town fixed for the meeting, it is hoped that those members of other branches who can spare the time, will join their Eastern County friends. The dinner is fixed for the evening of the 26th, so that a single

night's stay in Northampton will suffice for both gatherings. Some interesting papers, particulars of which will be found in our Association Intelligence, are promised.

THE following additional subscriptions have been received for the Marks Fund : from Mr. A. H. Mountford, 10s. 6d. ; and from J. S. G. Campion, £1 1s. The total amount collected has been £626 2s., out of which the Committee have given the widow an immediate grant of £30. The remainder will be invested, and the interest given to Mrs. Marks for the maintenance and education of the children. As each child arrives at the age of fifteen the trustees will be at liberty to take one-fourth of the principal for the separate advancement in life of that child. The Treasurer wishes to be allowed the opportunity of thanking those subscribers, who were members of the profession, whose contributions amounted to £69 15s. for their response to the appeal made by Mr. Browne-Mason through the columns of this Journal. We need scarcely add that we are gratified at the generous help rendered to the case.

IN our notice of Dr. Talbot's work on "Irregularities of the Teeth," we omitted to mention that Mr. H. K. Lewis, of Gower Street, is the publisher of the book in this country. We were not aware of the fact when the review was written, or we should have taken note of it.

THE Cricket Club of the Dental Hospital of London has been achieving some very creditable successes this season. They have so far played seven matches ; of these they have won five, lost one and drawn one. The lost match was the first of the season, and the draw was very much in favour of the club, they having scored 100 and got their opponents' six best wickets for 39. The last match was against the National Dental, and ended in a very complete victory for Leicester Square. Messrs. James and Arthur Colyer (the house-surgeon and assistant house-surgeon), divide the honours between them, each with a batting average of 25, the elder brother figuring as very much the most destructive bowler. It is always pleasant to find hard work and hard play going together.

At a meeting of the Representative Board to be held on the 7th of July, Mr. Canton will propose:—That in Bye-law 7 the words vice-presidents be inserted after the word president in the first line. The Bye-law at present runs as follows:—“*The officers shall consist of a president and president-elect, treasurer, an editor or editors, and hon. secretary and secretary of the Association, and a president and vice-president of the Representative Board.*”

THE fact that professional gentleman and people of position allowed their names to be used in circulars issued by a certain irregular dental practitioner was severely animadverted upon by the London *Figaro* in 1886, but apparently without effect. The matter has now been brought before the Medical Council, and, as may be seen in our report, the conduct of such persons is spoken of in no measured terms of disapprobation. It may be difficult for ladies and clergymen to realise the amount of harm which arises from thus lending their countenance to proceedings the import of which they do not, and indeed can hardly be expected to comprehend; but that qualified medical men should allow their names to be so used is a puzzle which we cannot understand. We hope that both lay and professional patrons of the offensive circular referred to at the last Medical Council meeting will consider the expression of opinion recorded in our report of the discussion as worthy of some attention.

WE notice that Mr. J. T. Fripp, L.D.S.I., has been elected a member of the School Board for the Parish of Willesden.

APPOINTMENTS.

GEORGE O. WHITTAKER, L.D.S.Eng., has been appointed Hon. Dental Surgeon to the Manchester Hospital for Consumption and Diseases of the Throat.

WILLIAM DE BUSEY WOODBURN, L.D.S., was unanimously elected Surgeon Dentist to the Glasgow Western Infirmary, on the 6th June.

ARTHUR W. THOMPSON, L.D.S.Glas., has been appointed Honorary Dental Surgeon to the Durham County Hospital, *vice* John Caldcleugh, J.P., L.D.S.Eng., resigned.

CORRESPONDENCE.

We do not hold ourselves responsible for the views expressed by our Correspondents.

The Annual Meeting.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—I regret I am unable to announce that specimens or models in any considerable quantity have come to hand in Dublin since I wrote to you. The arrangements we have made ought to be clearly understood by this time by all the members of the British Dental Association who read the Journal, and I may perhaps venture to draw their attention to the question of security and safe return of the specimens entrusted to our care, by pointing out that the catalogue to be printed provides for this by publishing the names of all exhibitors. To each bottle or specimen we also attach an adhesive label bearing the owners' names before we place it in the classification to be adopted for museum purposes, and as the re-distribution of the contents of the museum will be in the hands of the constructors of it, I cannot believe that the losses or "disappearances" of specimens on former occasions are possible, and injury to precious specimens is amply provided against by the use of locked or sealed glass cases.

I am happy to announce that we have been offered the use of the Physiological Laboratory of Trinity College, and the large collection of microscopes used by Professor Purser in his practical class teaching; and Dr. Arthur Baker, Mr. Arthur Underwood, Mr. Howard Mummery, Mr. Charters White, Mr. John Andrew, and Mr. M. Johnson will take charge of this novel and interesting addition to our programme, which may now be considered fairly attractive. As fifty or sixty microscopes can be shown at once properly arranged on the laboratory tables with comfort to a large body of members or visitors, we cannot too heartily thank these gentlemen for their generous kindness in taking the trouble of organising such an important exhibition of the progress of science as applied to the observation of the dental tissues. The Royal University of Ireland have also placed their handsome rooms at our disposal, and I have much pleasure in announcing that the annual dinner of the Association will take place in the Great Hall where H.R.H. The Princess of Wales had the degree of Doctor of Music conferred upon her by the Senate. This hall is capable of accommodating 2,000 persons, and has a commodious gallery and a fine organ. I would earnestly urge upon all members of our Association to give us early notice of their intention to be present, so that we can not only extend to them the proverbial Irish welcome, a "*cead mille failte*," but make the occasion worthy of our profession and our country, by careful attention to all the little details of organisation so much required for the annual meeting. We should all gladly enter into the joyous nature of the occasion by renewing old friendships and cementing new ones, but at the same time we should give our best

thoughts and energies to the steady support of the scientific progress of our profession, and each and all contribute to such a desirable object. During my recent visit to York and many other English cities, I cannot speak too gratefully of the unfailing kindness and hospitality shown to me by our British Dental Association brethren, and the deep interest taken in the now travelled "bottle rack" I designed to hold the specimens of abnormal teeth for the annual museum. I have every reason to hope that the promises of support and active co-operation in the work of the annual meeting made to me by my London and provincial brethren will be amply fulfilled, and that many ingenious and useful instruments or tools will be shown in public for the first time.

I am, Sir, yours faithfully,

C. W. BOOTH PEARSALL, F.R.C.S.I.

13, Upper Merrion Street,
June 4th, 1888.

The Annual Museum.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—As all our arrangements for the reception of specimens are now complete, I wish to urge upon the members of the Association the necessity of sending over their exhibits as soon as possible in order that the museum committee may be enabled to classify and display them to the best advantage. The committee are desirous of showing all specimens entrusted to them, but as the time which they can devote to the museum is necessarily limited, specimens arriving late will run the risk of not being mentioned in the catalogue, and of being unclassified in the museum. Those members who may prefer to mount their own specimens can obtain bottles of the correct size and shape from Messrs. Pellatt & Co., 17, St. Bride Street, Ludgate Circus, London.

In a previous letter I described a method of mounting teeth by means of silver suture wire and corks in either end of the bottles. We have now abandoned this method in favour of a better one suggested by Mr. Pearsall, viz., a small hole is drilled in a convenient part of the tooth, and into this a short length of piano wire, of sufficient stiffness, is cemented with sealing wax; this wire is then bent, if necessary, so as to come out through the section of cork at the mouth of the bottle, taking care that the tooth is fairly in the middle of the bottle; if sealing wax is then flushed over the cork and mouth of the bottle, all will remain steady.

I remain, yours faithfully,

A. W. W. BAKER, M.D., F.R.C.S.I.,
Hon. Sec. Museum Section.

18, Lower Fitzwilliam Street, Dublin,
June 6th, 1888.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—One great feature of the Dublin meeting promises to be the museum. All will agree that the organisers of the meeting are showing great energy and perseverance, and are making no little sacrifice in order to promote the success of the gathering. The least that members can do is to severally back up these efforts by all the means in their power. Those who may not be able to attend may at least send contributions to the museum, and as the labour of classifying and arranging specimens promises to be arduous, it is to be hoped that intending contributors will forward their exhibits without delay. As a London member who has had experience in such matters, I feel sympathy for our Dublin friends, and venture to make this appeal on their behalf.

Yours, &c.,

B.

Demonstrations at the Annual Meeting.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—Though the organisation of a large and interesting set of demonstrations for the annual meeting in Dublin has been proceeding quietly for several months, the Chairman of the Committee of this section has thought it better that the attention of the members of the British Dental Association should be directed, in the first instance, to the museum.

In the museum, which we expect will be well supported by the loan of apparatus, specimens, casts, photographs, &c., it is manifest that these loans should be sent, at latest, early in July, in order that they may be properly classified and accurately tabulated. If the members are prompt and liberal in their contributions, we can fairly hope to send out a fortnight before the annual meeting a catalogue of great utility and interest, setting forth the contents of the different sections of the museum, with the names of those who have sent in the loans, and full descriptive particulars of each item in the exhibition.

Now although the object of this communication is to treat chiefly of the demonstrations, I trust the members of this Association will one and all give *early* support to the museum. They will, in fact, have plenty of time to turn their attention to the organisation of demonstrations after another month, and it is this consideration which has deterred me from writing until now about the arrangements for clinics, &c.

The Committee for the Demonstrations has not yet been completely formed, but among those who have promised support, either by personal demonstrations or otherwise, I may mention the names of Messrs. John J. Andrew, F. H. Balkwill, R. Barnett, Storer Bennett, J. A. Biggs, Frank H. Briggs, G. Brunton, J. F. Corbett, George Cunningham, W. St. George Elliott, H. P. Fernald, Geo. F. Grant,

Robert Hazelton, S. J. Hutchinson, F. E. Huxley, R. F. H. King, R. P. Lennox, W. B. Macleod, Leslie Maxwell, T. Cooke Parson, C. Claude Rogers, R. Theodore Stack, A. B. Verrier, J. Walker, Charles Wall, E. Lloyd Williams, R. H. Woodhouse and G. W. Yeates.

We have in all up to the present promises of some twenty demonstrations, including all forms of gold filling, difficult impression taking, implantation, amalgam filling, use of matrices, use of separators, special clamps, attachment of crowns, continuous gum work, electric mallet improvements, construction of artificial vels, &c.

There is plenty of room for many more demonstrations, but it has been thought better to leave a considerable margin for volunteers, for all of whom we have plenty of space in beautifully lighted rooms. It is the wish of the local section of the Demonstration Committee to have everything as nicely arranged and comfortable as possible for each operator, and we will thankfully receive the proposal of any member of the Association to give a demonstration, and if he will let us know in time what he may require, we will try to the best of our ability to meet his needs.

Messrs. Ash & Sons have most kindly promised to supply us liberally with dental furniture, chairs, operating stands, &c., but it will be necessary for operators to bring their own smaller appliances.

A space will be partitioned off for each demonstrator of the same size as that which was allotted at the recent Congress at Washington. This will prevent any crushing, and will enable the operation to be seen by a large number of spectators.

The chief difficulty with which we shall have to contend is to provide patients. We hope that many demonstrators will be able to bring their own patients; if a large number can do so, it will relieve the executive here of some anxiety. The committee have had a form printed to the following effect:—

Demonstrator's Name.	Demonstrations proposed.	Can you bring your own Patient.	Requirements from Local Committee. [State here fully all Particulars; Gas Supply. Water do., &c.]

N.B.—While the Demonstration Committee will do all in their power to provide a full supply of patients, they earnestly request that you will, if possible, bring your own patient, e.g., a brother dentist or other friend. If you cannot promise to do so now, and it should happen that between this and the time of meeting you are able to engage a patient, please write at an early date to

R. THEODORE STACK, 10, Westland Row, Dublin,
Hon. Sec. Demonstration Section.

This form will be sent to all applicants.

I think I have now, though in a very meagre way, touched on the main points about the demonstrations, and I have great hope that they will prove a very attractive and instructive feature of the Annual Meeting, I may say in conclusion that it is the wish of all Irishmen, that the members shall come over accompanied by their wives, sisters, daughters, or other lady friends. He that bringeth one doeth well, but he that bringeth more doeth better.

Believe me to be, dear Sir, very faithfully yours,

R. THEODORE STACK.

Southern Counties Branch Annual Meeting.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—Permit me to state that Mr. Arthur King, of Fitzclarence House, Kent Road, Southsea, is the hon. local secretary for the purposes of this meeting, to whom all communications should be addressed with reference to the organisation of the day's proceedings, and applications made for tickets for the dinner (price 6s. 6d).

Programmes will be sent on application to him, and he should be informed by June 21st, at the latest, of the intention of any member or friend to take dinner or luncheon, or both.

Our President and Council will be delighted to welcome with all heartiness such of our staunch friends in London and elsewhere who will give us the pleasure of their company and treat themselves to the delightful sea breezes of Southsea.

Yours faithfully,

I, Silwood Road, Brighton,
June 9th.

J. DENNANT, *Hon. Sec.*

Recent Papers at the Odontological Society.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—Is it desirable that in order to have a paper of one sort or another at every meeting, the officials of the Odontological Society should descend into the highways and byeways, and invite members of the medical profession, utterly unknown to the scientific world, except as practitioners of a certain reputation, to introduce contributions, composed either of strings of platitudes or of speculations at variance with the fundamental facts of dental science? Acceptance of papers such as have lately been read by certain non-members of the Society is calculated neither to advance science nor enhance the Society's reputation; and members who, like myself, feel indignant at the abuse which is being made of the Society's hospitality have no alternative but to appeal to the general body of members to put a stop to what promises otherwise to become a scandal. If some care and

discrimination be not shown in the future, and if visitors are invited to lecture the Society, in dogmatic fashion, on subjects with which they are evidently imperfectly acquainted, there will be nothing for it but some plain speaking at the meetings, and probably there may occur some unpleasant scenes. Members hitherto have been very patient. They have of course felt that to severely criticise the inferior, not to say ludicrous, contribution of a visitor, virtually there on the invitation of the council, was an invidious and ungracious task; but it will become a question whether silence under similar circumstances is always to be expected from those who feel strongly on this subject. If papers of merit and value consistent with the established reputation of the Odontological Society are not forthcoming for every meeting, it would certainly be better to do without. Better the Society should have blank evenings, than that it should, by acceptance of papers such as I have alluded to, render itself and the profession which it represents not only ridiculous, but perhaps odious in the eyes of those who pay attention to its proceedings, and entirely destroy the scientific reputation which the work of its members had begun slowly to construct.

Your faithfully,
EX-OFFICIO.

London, *May 17th*, 1888.

“How to Reform the Dental Departments of our Hospitals.”

TO THE EDITOR OF THE “JOURNAL OF THE BRITISH DENTAL ASSOCIATION.”

DEAR SIR,—I was very pleased to see your “leader” on Mr. Newland Pedley’s paper in *Medical Journal*, April 7th, at the same time disappointed that a full copy of it was not inserted, as all dentists do not see the journal referred to, and that Mr. Newland Pedley has opened one of the greatest questions before the profession, namely, how closely can the education of medical and dental students be carried on. I am one of those who think that union with the medical profession cannot be but good for them and us, but there are still many who uphold “Home Rule” views.

Although Mr. Newland Pedley’s remarks are more applicable to those hospitals having a medical school, I think that a discussion in your valuable journal cannot but lead to the benefit of hospitals and dental surgeons alike.

The first point that struck me forcibly was the interest Mr. Newland Pedley is showing at Guy’s, to show the other members of the staff, and what is even more important, to demonstrate to students the real position of dental surgery as a specialty. I fully endorse the statement, that a dental surgeon should be prepared to give as much time to an appointment as it demands. It would be very interesting to know what is the average time spent by dentists at some of the

large dispensaries and hospitals. In some cases we should find, I fear, assistants or pupils are sent to represent the dental department ; one cannot expect to be respected by his medical colleagues or the general public as one of the regular staff, who devote two or three afternoons in the same institution a week. There is no doubt, a great tendency in many dental appointments to the radical rather than the conservative treatment of cases ; they may look tedious or disagreeable.

Now, if the proposal of Mr. Newland Pedley be carried out in all the London hospitals having medical schools (he undoubtedly refers specially to these institutions), how would it affect the special dental hospitals? Would they suffer in the loss of patients, funds, and most important, students? Patients if they found they could obtain as good treatment and (in some cases in a quieter manner, *i.e.*, less number of students around them,) nearer to their homes, would naturally seek that which was close at hand, as time with nearly all hospital patients means money. The funds would not suffer much, I think, as the dental hospitals have so many personal friends.

The creation of further advantages to dental students than those now offered at medical schools by means of fully organised dental schools with extensive lectures and demonstrations, and having already the power to "sign up," would induce many men to take their full course at the general school, especially those proceeding to the M.R.C.S.

Loss of time in the early morning going from one school to another, is a consideration on the part of the industrious, and dental students as a body are noted for their close application to work. A practical example of having the two schools near each other may be seen in the increased number of students (dental) at Charing Cross, and the paucity of those at the more distant parts of London from the dental schools.

Surely it would be a great comfort, at least to dental, as well as medical practitioners, to be taught to administer the gas with those they are likely to meet with in after life. How few of us have not had "scenes" at "gas cases," and a doubtful but hopeful feeling when called upon to meet a strange medical man. "Union is strength," and the closer we are united to the medical profession the better we shall appreciate the help of each other.

I was one of many who felt disappointed when I found at the Odontological Society a paper announced in Mr. Pedley's name, on this subject, was not called for ; no doubt that learned body had special reasons for withdrawing it, but I cannot help thinking how useful a discussion there would have been to the medical and dental professions of all parts of the world.

Believe me, yours respectfully,

WALTER HARRISON.

Brighton, May 25th, 1888.

"The Six-Year-Old Molars."

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—Having read Mr. Bowden's interesting paper on "The Treatment of the Six-year-old Molars," in your last issue, I thought it might be useful if I mentioned another plan of treating these six-year-old molars ; for example, patients under ten are frequently brought to the dentist with these four molars decayed, with a superficial caries confined to almost the whole of the masticating surface ; what is the treatment in these cases? We know well that cutting into the dentine is both tedious and painful to the little patients, and at the same time, the pulp cavities being extremely large at this early age, one is always liable to expose the pulp tissue (although the greatest care may have been taken). My plan of treatment in the majority of these cases is as follows : it is most simple, and many will say most unscientific. I cleanse the carious cavities with iodine, and then swab out well with rectified spirit until the carious tissue appears quite dry, and as a rule this causes no pain ; I seldom use an excavator or any other instrument save the dressing forceps ; I now insert the Sullivan's amalgam, and leave the rest of the treatment to nature. My theory is that by leaving the carious matter alone, one leaves a natural non-conducting pad between the pulp cavity and the metal filling ; however unscientific the above mode of treatment may appear, practice proves the opposite.

Believe me, dear Sir, faithfully yours,

JAMES RYMER, M.R.C.S., L.D.S.Eng.

Maidstone, *May 23rd*, 1888.

OBITUARY.

WE regret to have to announce the death of Mr. WILLIAM LANG, L.D.S.Glas., which took place on the 21st of May.

NOTE.—ANONYMOUS letters directed to the Secretary of the Association cannot receive attention.

P.O. Orders must be accompanied by Letters of Advice.

Communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

Subscriptions to the Treasurer, 40, Leicester Square.

All Contributions intended for publication in the Journal must be written on one side of the paper only. The latest date for receiving contributions for the current number is the 5th of the month.

SPECIAL NOTICE—All communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

THE JOURNAL
OF THE
BRITISH DENTAL ASSOCIATION
A
MONTHLY REVIEW OF DENTAL SURGERY.

No. 7.

JULY 16, 1888.

VOL. IX.

Recent Branch Meetings.

AMONG all the signs of the steady growth and healthy development of the British Dental Association during the last few years, nothing is more striking than the change which has come over the annual meetings of our Branches. The merit of the papers and the style of the discussions, are advancing by leaps and bounds, while, perhaps most gratifying of all as a sign of the improved position in the public estimation which our profession has already attained, we notice that at the annual dinners, which are such valuable adjuncts to these meetings, it is more and more the custom for distinguished representatives of the other learned professions, arts and sciences to be present. As we have already often repeated, there is no agent so powerful to destroy the impudent quackery that thrives on the ignorance and gullibility of the public as the spread among the

intelligent portion of the lay community of true sense of the principles of our Association, and there is surely no readier road to attain this end than that of asking representative men outside the medical world to meet us, talk to us and listen to us. Any of our readers may notice for himself from a perusal of the present number how markedly this has been the practice this year. When dignitaries of the church, officers in the army and navy, and lord mayors sit side by side with the leading medical men of the neighbourhood at our public dinners, they not only add dignity to the proceedings and raise the Association in the view of the public, but they also acquire a great deal of information about our profession which, as it spreads from them throughout society, saps the roots of charlatanism and discreditable practice; for these reasons, though not for these alone, we look forward to meeting and listening to a strong lay contingent at Dublin next month.

From another point of view this growth of Branch meetings both in quality and in quantity is rather embarrassing to the sub-editor of the Journal. It is difficult to condense good matter, yet it would require a bold and hardened editor to venture to appear before our excellent treasurer with longer bills for extra printing and postage; the result of the dilemma is, as usual, compromise, and those who find their excellent contributions condensed or postponed, must remember that until the Association is much richer the evil is unavoidable.

We notice with interest that many allusions were made at the recent meetings to the new garb which quackery is now assuming, namely, the banding together of the quacks into companies or institutes, and the assumption, often quite without right, of the the American nationality. It is almost inconceivable that any person who can read or write, and is sane enough to be safely permitted to remain at

large should still believe that there is anything special or peculiar about American dentistry as compared with the dentistry in other civilised countries, where educated men practice the profession ; yet though the superstition prevails mostly in the lowest strata of society, instances are not wanting of the susceptibility of people in high places to a lying advertisement. Bogus American dentists are distinct from English and American professional men, just as they are distinct from all honest men, namely, in that they promise what they do not perform, and extort large sums of money without rendering an equivalent. If these folks are not altogether beneath the notice of those among us who are really Americans, we think a frank repudiation of these discreditable *soi-disant confrères* might not be without effect.

ASSOCIATION INTELLIGENCE.

Representative Board Meeting.

A MEETING of the Representative Board was held on Saturday, July 7th, when the following members were present :—Mr. J. Smith Turner (in the chair) ; Messrs. Canton, Cartwright, Coffin, Hutchinson, Matheson, G. W. Parkinson, C. S. Tomes, Weiss, West, Charters White, Lloyd Williams, A. J. Woodhouse, and the Hon. Sec., Morton Smale (London), Dennant (Brighton), Cunningham (Cambridge), Rymer (Croydon), Slack (Dublin), Biggs (Glasgow), Cole (Ipswich), Waite (Liverpool), T. E. King, (York).

Letters of apology were read from Messrs. Pearsall, Rhodes, Hunt, and R. F. H. King.

The HON. SECRETARY said that the Association had been the means of causing several persons unlawfully calling themselves dentists to cease to do so, and in some of the cases to leave the town in which they were practising.

The TREASURER reported a balance of £691 at the bank, and that there were still 310 members in arrears with their subscriptions.

Mr. CANTON's resolution, that the word vice-presidents be added to bye-law 7 was carried, and it will be recommended to the annual meeting in August that the bye-law shall read as follows :

"The officers shall consist of a president, vice-presidents, and president-elect, treasurer, an editor or editors, and hon. secretary and secretary of the Association, and a president and vice-president of the Representative Board."

An invitation for the annual meeting of 1889 was read from the Southern Counties Branch, and it was decided to recommend that the invitation be accepted.

The programme for the annual meeting in Dublin was submitted and adopted, and will be found on page 405.

It was decided that member's tickets be circulated as usual, and that members desiring a visitor's ticket should furnish the Secretary of the Irish Branch with the name and address of such visitor.

The following resolutions passed at the annual meeting of the Scottish Branch were considered :—

RESOLUTION I.—That this meeting of the Scottish Branch begs to call the attention of the Representative Board to the large number of men who, since 1882, have been placed upon the Dentists' Register, under Clause II. of Section 37 of the Dentists Act, and asks the executive to use its influence with the General Medical Council to be careful in admitting claims under said section.

The PRESIDENT pointed out that this had already been done.

RESOLUTION II.—That the Representative Board be asked to approach or take such steps as are open to them to move the commission appointed in connection with the Universities (Scotland) Bill to empower the universities of Scotland to institute a degree in dentistry.

Substantially, the same resolution had been passed by the West of Scotland Branch, the Eastern Counties and Southern Counties Branch.

It was resolved that this resolution be printed and circulated amongst the members of the Board, and that it be discussed at a future meeting of the Representative Board.

A copy of the memorial sent to the Lords of the Admiralty was submitted, and the following reply read :—

SIR,—I am commanded by my Lords Commissioners of the Admiralty to acknowledge the receipt of your Memorial (with enclosures requesting permission for a dental practitioner to examine the recruits passing through the London Depot, and, in reply, I am to acquaint

you that their lordships are advised that no benefit would accrue to the recruiting of men by the adoption of this proposal, and that the arrangements at present in force provide for all the requirements in the matter.

I am, Sir,
Your obedient Servant,

EVAN MACGREGOR.

It was decided that the subject be further considered by the sub-committee, and that it should report the result of its deliberations to the next meeting.

The Annual General Meeting.

THE Annual General Meeting of the Association will be held in the School of Physic, Trinity College, Dublin; The Royal College of Surgeons in Ireland, and the Royal University of Ireland, on Thursday, Friday, and Saturday, August 23rd, 24th, and 25th, 1888.

The following will be the order of proceedings :—

Thursday, August 23rd.

9 a.m.—Meeting of the Representative Board in the Board Room of Royal College of Surgeons in Ireland.

"Association and General Enquiry Office," Temporary Post Office and the Annual Museum open at the School of Physic, Trinity College.

10.30 a.m.—The Annual Meeting for business (open to members only) will assemble in the Anatomy Theatre, School of Physic, Trinity College. *At the termination of the Association business the Meeting will be open to visitors.* J. R. BROWNLIE, L.D.S.Eng., will deliver his valedictory address.

DANIEL CORBETT, M.R.C.S., L.D.S.Eng., will take the Chair and deliver an Address.

LIST OF PAPERS PROMISED.

"Anæsthetics in Dental Surgery," by ANTHONY H. CORLEY, M.D., late Pres. R.C.S.I.

"Dental Ethics," by R. THEODORE STACK, M.D.Dub., F.R.C.S.I., D.M.D.

"The Annual Museum and its Contents," by A. W. W. BAKER, M.D.Dub., F.R.C.S.I., L.D.S.I.

"The Use of Imagination in the Design and Construction of Artificial Teeth," by W. BOOTH PEARSALL, F.R.C.S.I., M.R.I.A.

"On some Work-room Appliances," by A. J. WATTS, L.D.S.I.

"On _____," by G. M. P. MURRAY, L.R.C.S.I.

"On _____," by J. J. ANDREW, L.D.S.Eng.

"On some Properties of Amalgams," by AMOS KIRBY, L.D.S.Eng.

"Dentists and Dentistry in Schools and Colleges," by J. O'DUFFY, L.D.S.I.

1.30 p.m.—Adjournment for Luncheon in Dining Hall, Trinity College.

2.30 p.m.—Reading and Discussion of Papers in Anatomy Theatre, School of Physic.

5 p.m.—Adjournment.

7 p.m.—The Annual Dinner of the Association will take place at the Royal University of Ireland. The Band of the Royal Irish Constabulary will perform a select programme of Music.

Friday, August 24th.

9 a.m.—Demonstrations and Clinics in the Surgery Museum, School of Physic, Trinity College.

"Association and General Enquiry Office," Temporary Post Office and the Annual Museum open in the School of Physic, Trinity College.

12.30 p.m.—The Annual Meeting of the Dental Benevolent Fund in the Anatomy Theatre, School of Physic.

1.30 p.m.—Adjournment for Luncheon in Dining Hall, Trinity College.

2.30 p.m.—Reading and Discussion of Papers will be continued in Anatomy Theatre, School of Physic, Trinity College.

5 p.m.—Adjournment.

8.30 p.m.—The Irish Reception Committee will entertain the Members, who have received invitations, at a *Conversazione* in the Royal College of Surgeons in Ireland. Music.

Saturday, August 25th.

9.45 a.m.—Messrs. Arthur Guinness, Son & Co. (Ltd.) will conduct a party of Members and Visitors who have received invitations, limited to 150 in number, over the largest brewery in the world. Entrance by St. James' Gate, end of Thomas Street.

12.40 p.m.—The Annual Excursion will take place to the Hill of Howth by train, nine miles north of Dublin [*Amiens St. Terminus*]. Mr. J. R. Wigham has kindly consented to give a short description of "Gas Illumination in Lighthouses" at the Baily Lighthouse, after Luncheon. After the visit to the Lighthouse

the party will be conducted round "The New Path," or sent in Carriages to the Railway Station by the south side of the Hill.

SPECIAL NOTICES.

"The Association and General Enquiry Office" will open at 9 a.m. daily in Trinity College, under the superintendence of W. B. Pearsall and Mr. Wm. Shea, from whom all tickets for members, visitors, lunches, and excursions may be obtained. The Association book will be found in this office, and members are reminded that it must be signed before the tickets can be exchanged for the vouchers previously sent to each member from London.

By the courtesy of the Secretary of the General Post Office, Dublin, a temporary Post Office for the posting and delivery on application of letters, the sale of postage stamps, the acceptance and delivery of telegrams, and the registration of letters, will be open in the Annual Museum from 9 a.m. to 5 p.m. on Thursday, Friday and Saturday, August 23rd, 24th and 25th.

Ladies' Carriage Excursions will start from the School of Physic under the care of the Rev. Canon Bagot. Tickets, price 2/6 each, can be had at the General Enquiry Office, next entrance to Annual Museum.

Luncheon tickets, price 1/6 each (which will include cost of wine, beer, mineral waters, &c.) will be issued daily at same place, or at entrance of Dining Hall, Trinity College.

The Ladies' Excursions are planned to terminate in time to join the members at luncheon.

Balcony tickets for the use of ladies wishing to be present at the Annual Dinner will be issued at this office.

MORTON SMALE, *Hon. Sec. B.D.A.*

W. BOOTH PEARSALL, *Hon. Sec. Irish Branch,*

13, Upper Merrion Street, Dublin.

LIST OF HOTELS AND LODGINGS AT WHICH VISITORS CAN BE ACCOMMODATED.

HOTELS.—"Gresham Hotel," Sackville Street, 6s., or full board, 10s.; "Morrison's Hotel," Dawson Street, bed, breakfast, and attendance, 6s.; "Hibernian Hotel," Dawson Street, bed, breakfast, and attendance, 6s.; "Maple's Hotel," Kildare Street, bed, breakfast, and attendance, 6s.; "Buswell's Hotel," Molesworth Street, bed, breakfast, and attendance, 6s.; "Tarpey's Hotel," Nassau Street, bed, breakfast, and attendance, 6s.; "The Hammam Hotel," Sackville Street, bed, breakfast, and attendance, 5s. 6d.; "Martin's Hotel," Baggot Street, Lower, bed, breakfast, and attendance, 5s. 6d.; "Jury's Hotel," College Green, bed, breakfast, and attendance, 6s.; "Grosvenor Hotel," Westland Row, bed, breakfast, and attendance, 6s.; "Campbell's Hotel," Molesworth Street, bed, breakfast, and attendance, 5s. 6d.; "Mackin's Hotel," Dawson Street, bed, breakfast, 6s. (bachelors' hotel), "Central Hotel," City Markets.

TEMPERANCE HOTELS.—“Russell’s,” St. Stephen’s Green, bed, breakfast, and attendance, 5s. 6d.; “Edinburgh,” Sackville Street, bed, breakfast, and attendance, 5s. 6d.; “Aitken’s,” Westmoreland Street, bed, breakfast, and attendance, 5s.

The above hotels are well within a mile of Trinity College, and many of them within a quarter-mile.

HOTEL OUTSIDE TOWN, but within easy reach by train, three times in each hour.

KINGSTOWN, “Royal Marine Hotel,” bed, breakfast, and attendance, 7s. 6d. and 9s.

The following houses will take members at 5s. 6d. for bed and breakfast:

LOWER LEESON STREET.—Nos. 1 & 2, Mrs. Bolton; 78, Mrs. Murphy; 96, Mrs. Poole; 97, Mrs. Elwood.

LOWER BAGGOT STREET.—Nos. 54, Mrs. Ferral; 95, Mrs. Hayde; 96 & 97, Mrs. Brewster; 103 & 104, Mrs. Williams; 113, Mrs. Gamble; 115, Mrs. Stone; 116, Miss Campling; 117, Mrs. Gardiner, bed, breakfast and attendance, 7s.; 122, Mrs. Guy, bed, breakfast, and attendance, 6s.

UPPER BAGGOT STREET, No. 31, Mrs. Baston.

Sitting rooms can be had in many of the above houses.

LOWER MOUNT STREET.—Nos. 19 & 20, Mrs. Borthistle, bed, breakfast, and attendance, 4s. 6d.; 21, 22 & 23, Mrs. Brock, bed, breakfast, and attendance, 4s. 6d.; 57, Mrs. Moore, bed, breakfast, and attendance, 5s.; 70, Mrs. Morris, bed, breakfast, and attendance, 5s.; 71, Miss Hale, bed, breakfast, and attendance, 5s.; 73, Mrs. Madden, bed, breakfast, and attendance, 4s. 6d.

SOUTH FREDERICK STREET.—No. 15, Mrs. Longton, bed, breakfast, and attendance, 5s. 6d.; 29, Mrs. Wilson, bed, breakfast, and attendance, 5s. 6d.

Sitting rooms can be had in many of the above houses.

HOLLES STREET.—No. 3, Mrs. Ryan, bed and breakfast, 4s. 6d.; 35, Mrs. Gilbert, bed and breakfast, 4s. 6d. each; 36, Mrs. Keogh, sitting and two bedrooms, £2 2s., bed and breakfast, 4s. 6d.

CLARE STREET, No. 14, Mrs. Tuke, sitting room and 2 bedrooms, £2 5s. per week; bed and breakfast, 5s. 6d. per day.

NASSAU STREET, No. 17, Mrs. Sidford, sitting room and 2 bedrooms, £2 5s. per week; bed and breakfast, 5s. per day.

UPPER LEESON STREET, No. 16, Mrs. Darling, bed and breakfast, 5s. per day.

NORTH FREDERICK STREET.—No. 13, Mrs. Keogh, bed and breakfast, 5s. 6d.; 15, Miss O’Reilly, bed and breakfast, 5s.; 18, Mrs. Kennedy, 5s.; 34, Mrs. Winter, 5s.

GARDINER’S PLACE, Nos. 10 & 11, Mrs. Montgomery, boarding house, bed and breakfast, 5s. per day, full board, 8s.

GARDINER’S STREET, UPPER.—No. 5, Miss Philan, sitting and bedroom, £1 10s. per week, extra bedroom, 10s. per week; 8, Mrs. Conarchy, sitting and bedroom, £1 5s. per week, extra bedrooms, 8s. and 9s. per week.

Midland Branch.

ANNUAL CONFERENCE AT YORK.

(Continued from page 364.)

Mr. F. H. WEEKES then read a paper on Anæsthetics, which appeared in our June number, at page 366.

Mr. F. HARRISON (Sheffield), said he had noticed that persons on repeated administration of nitrous oxide gas became sick and vomited. If medical men were equal to the administration of anæsthetics, he thought it would be well that they as dentists should also be able to give it. At present if a difficulty arose and an anæsthetic had to be given, the question arose, "shall I send for the patient's medical man, or shall I send for a specialist?" If they sent for a specialist he came, and all went on very well and passed off successfully, but they were not long before on going down the street they met the medical practitioner and he thought they had done him a great wrong in bringing any one else in to see his patient. These were matters that ought to be considered and spoken about.

Mr. F. BULLIN said the dental surgeons he had known were frequently the best administrators of anæsthetics. He had over one hundred medical friends, and not one of them could give nitrous oxide gas. He asked if it was not a farce to send for medical men for that purpose. Of course every one of them understood the administration of chloroform, and so did he thirty years ago. But inasmuch as their medical friends were not taught particularly to give nitrous oxide gas, was it not a farce to send for them. As a matter of fact they (dentists) were frequently called to the bedside by their medical friends to give it to their patients, hence, the advice of his friend, Mr. Harrison, was utterly useless. Some time ago a person sent twelve miles for an L.D.S. to administer the anæsthetic, and he knew a lady who had three tumours removed from her head, and it felt to his lot to give twelve doses—three doses being necessary during the removal of each tumour—and he was sure each of the gentlemen present could have done the same, but he did not know one medical man capable of doing so. It was quite a new doctrine to him to be advised to send for a medical man. The administration of anæsthetics was quite within the province of the dental practitioner.

Mr. STORY (Hull), said he should be very sorry if the discussion on the paper resolved into the discussion of a bye-issue. It was

undoubtedly necessary that a man who administered an anæsthetic should be qualified to do his work. He thought that so far as nitrous oxide gas was concerned, people might think it necessary that a medical man should administer it, but he found that the medical men knew very little about it, and that the dental men knew more than they did on that subject. He rose to ask a question as to the administration of gas and ether. Mr. Weekes said he thought that Dr. Hewett's apparatus was the best. He (Mr. Story) had become possessed of Dr. Dudley Buxton's apparatus, and his opinion was that the administration of gas should be continued for a time and slowly changed to ether. He thought that when the paper came to be printed it would be a pity if it went out with the impression that there should be a rapid change from ether to gas. He always had a medical man present during his operations. There were some medical men who administered very well, and there were others—well, the dentist did the work, and they had a medical man present.

Mr. RENSCHAW said he had a very peculiar case connected with the administration of oxide gas in October last. A lady came to him to have several teeth taken out. During the first administration he took two teeth out. She took the gas splendidly and came out all right. Afterwards he thought as she was rather delicate she had better go home and come again to have the operation finished. However, she rather dreaded a subsequent appointment and pressed to have gas the second time the same day, and the other teeth removed. After a little persuasion he agreed to do so. Instead of taking the gas as pleasantly as she did the first time, there was laboured inspiration from the time she inhaled the gas, and after the teeth were taken out she rapidly went into a state of hysteria and after remaining in that state for ten or fifteen minutes she lapsed into a condition of unconsciousness. Her sister got alarmed, jumped into the carriage and went for the medical man who came down and applied restoratives, which for a time were ineffectual and after she had been in the house for about an hour, they put her into the carriage still unconscious, and he saw her home. That occurred about five o'clock in the afternoon, and she was not restored to consciousness until about eight o'clock the same evening. He went up late in the evening and met the medical man at her house, who told him he did not think it was the result of giving gas twice on the same day. He thought the trouble occurred from shock to

the system from so many teeth being extracted at the same time. Instead of the unpleasant results passing away the next day she was unable to leave her bed ; the second day she was still unable, and it was not until the Friday following that she was able to dress herself and walk across the room. He wished to know if any gentleman present had had a case similar to it, and what were his ideas with reference to the symptoms which supervened on the administration of the nitrous oxide gas twice on the same day.

A MEMBER : Whose gas did you use ?

Mr. RENSHAW : I used my own gas. I am always particular about the gas I use.

Mr. G. BRUNTON (Leeds), said they were nothing if not practical, and he thought it would be well to bring out in the discussion what was the best anæsthetics for large operations. He much preferred chloroform from an operator's point of view. He could do better with chloroform. Mr. Harrison had said that repeated administrations of nitrous oxide gas caused sickness, but he thought that was caused by patients swallowing blood.

Mr. T. DILCOCK (Liverpool), said he had given nitrous oxide gas for many years, but rarely twice in one day. He had given it six times in the course of one month. He stated a case in which a lady had threatened to come upon a medical man for damages, chloroform had been administered and she had since been paralysed.

Dr. J. HORSFALL (Leeds), said there were one or two points in the paper, which struck him as not being in accordance with the effects which he had witnessed. Since the introduction of ether he had seen more nausea from ether than from chloroform properly administered. His own experience was that in the administration of chloroform the struggling was almost *nil*, but there was much struggling when ether was administered. It had been said that deaths under chloroform occurred often, but his experience was very much otherwise. It was very difficult to tell whether a person was fit to receive chloroform or ether.

Mr. PEARSALL preferred ether to chloroform, as it afforded more time to the operator. Experience was necessary to know exactly how to deal with anæsthetics. The best way to give ether was sitting up, and the best way to give chloroform was lying down. He begged them all to consider carefully the question of anæsthetics, as it would be brought before them at another meeting, and he thought it would require a good deal of pains to

have the subject threshed out. He advocated great caution, and laid great stress upon the dangers of carelessness.

Mr. BULLIN asked if it was such a very serious matter, how he accounted for it being entrusted to the youths or nurses in the hospitals.

Mr. PEARSALL said he could not speak as to what took place in England. They would not tolerate a youth giving it in Ireland unless he had shown great ability.

Mr. WEEKES in replying, said the point of his paper most attacked, was that portion in which he stated his opinion that a medical man should always be present when anæsthesia was given. He ought perhaps to have modified that statement by saying that a person ought to be qualified, and taught to deal with the very grave dangers of failure of heart, and failure of respiration that might happen without any warning at all. A medical man not capable of dealing with them ought not to be called a medical man. With regard to what was the best form of anæsthetic to give for longer operations there was room for slight difference of opinion. He had himself shown a very plain preference for ether. He had been present at the administration of ether, at least a thousand times. He had seen chloroform administered about fifteen hundred times with two deaths, but no death from ether. There was one death in York, but he was not present. Ether by itself, given to a person suffering from bronchitis, would result in a considerable increase in that pulmonary trouble. Mr. Horsfall had made statements, most of which he agreed with thoroughly, but his experience as to the amount of sickness from chloroform was different to Mr. Horsfall's. His experience was that a more intense vomiting had followed chloroform than ether. He himself had taken it several times. When he took ether he never was sick, but when he took chloroform he was intensely prostrated, equal to an attack of sea-sickness. That was his own experience, and he had seen it with a large number of patients. The struggling in ether varied. If they gave a large dose of chloroform the patient very soon got under, but there was a very large increase in the amount of danger. In the two deaths he had seen from chloroform, administered by thoroughly competent authorities, there was intense struggling in both cases. The great danger of chloroform was failure of the heart, and that was shown by failure of the pulse. It was, he granted, important to watch the respiration. He should be very sorry to trust him-

self to the care of anyone who did not observe carefully the condition of the pulse. It was important that a patient should feel no pain at all while he was under an anæsthetic if he had a weak heart. As regards youthful medical men being allowed to administer anæsthetics, he could only say that the whole subject of anæsthesia was a young one, and had been more studied by the young generation than by the old generation. In hospitals in England that he had had to do with, non-qualified men never were allowed to give them. Possibly most of them were youthful, but then they judged by the amount of experience they had had with anæsthesia, and not by appearance.

Mr. W. GLAISBY said he had much pleasure in proposing a hearty vote of thanks be given to Mr. Weekes.

Mr. E. H. WILLIAMS (Manchester), seconded the proposal, which was carried and acknowledged.

Mr. J. M. NICOL, L.D.S.Edin., read the following paper on

Dental Education.

The subject of Dental Education is one which, so far, has not, I believe, been directly discussed at any of the meetings of our Branch. The following remarks are intended more as an introduction to, and foundation for, a discussion on the subject, than as an exhaustive review of it; and to that end will be as brief as I possibly can make them, consistently with my purpose.

As most of us are aware, a somewhat warm debate has recently been carried on, as to whether a dentist should take a surgeon's or physician's diploma, or both, in addition to the L.D.S. Into this vexed question I do not propose to enter; but it cannot have failed to strike any dispassionate observer of the course of the late argument, that nearly all the disputants, whichever side happened to enlist their sympathies, were careful to enforce this view of the matter, that the curriculum required of the Licentiate in Dental Surgery embraces all that a dentist needs to know for the requirements of his daily work. It is against this doctrine that our present system of education is perfect for its purpose—that I would enter a respectful protest; and in what I have to say I shall endeavour as far as possible to look at the question from the standpoint of the dental student, to point out the defects which strike him most forcibly in his progress through the period of preparation for his professional life, and to suggest remedies for these defects.

My remarks will, for the sake of convenience, be mainly directed

to the curriculum of the College of Surgeons of England, but so far as they are applicable to the other licensing bodies of this kingdom, they hold good for them also.

Our system of education for our dental students may be divided into four parts :—(a) The preliminary examination in general education. (b) The three years' training in the mechanical department of our profession. (c) The classes and hospital practice taken in common with the general student of medicine. (d) The classes and hospital practice special to the dental student.

(a) Of the first of these, the preliminary examination in general education, I do not propose to say anything in the way of disparagement. For its purpose it is admirably fitted, and is at the same time such an examination as any lad of fifteen or sixteen, who possesses average abilities, and has had a good education, ought to be able easily to pass at the close of his school training.

(b) Coming next to the three years of training in the workshop, it is much to be desired that the authorities would insist on this being taken entirely by itself, and the whole of the three years devoted to it, instead of allowing it, as it too often is, to be taken along with other portions of the curriculum. Three years is not a day too much to learn thoroughly the details of the mechanical part of our profession, and I fear it is the slurring over of this most important branch of our training which accounts for the slovenly mechanical work one often sees produced by men who ought to know better. Our duty to our patients does not begin and end in the operating room. I regard it quite as much a part of the duty of a conscientious dental surgeon to superintend the mechanical work in all its stages, nay in some cases even to do it himself, as to look after the operative work. Many of the elaborate pieces of mechanism which are used for regulating nowadays, are such as can only be satisfactorily made by the designer, and it must be matter of frequent experience to those who have to entrust much of their mechanical work to assistants, how difficult it is to get them to understand exactly what you want, if you wish anything out of the common in the arrangement of the teeth in an artificial denture for instance. Apart from all this, it must be remembered that the period of mechanical training is the period during which the *hands* are educated to obey the will in the slightest particular, and if the hands be not properly trained while young and pliable, you will never make a first-rate operator of the possessor of them.

(c) The third portion of the curriculum, the classes and hospital practice, taken in common with the general student of medicine, consists of the following :—

Two courses of lectures on anatomy. One course of lectures on chemistry, physiology, surgery, medicine and materia medica. Dissections for a period of nine months. Practical chemistry for a period of three months. Clinical surgery for a period of twelve months.

With regard to this section of the curriculum, I would suggest that the second course of lectures on anatomy might be abolished, and an additional three months' dissection, which is of far more practical value, substituted for it. It would also be an improvement if a short course of practical physiology were added to the curriculum, which would enable the student to master the drudgery of the preparation and mounting of microscopical specimens, before he got to the purely dental portion of his studies, and thus save his time then.

(d) The last division of the curriculum is made up of the specially and purely dental classes and hospital practice. It comprises the following :—Two courses of lectures on dental anatomy and physiology, two courses of lectures on dental surgery and pathology, two courses of lectures on dental mechanics, one course of lectures on metallurgy, and two years of dental hospital practice.

The improvements I would like to see here are (a) the increase of the period of dental hospital practice from two years to three, and (b) the institution of a course of lectures on operative dental surgery. It cannot be denied, in view of the rapid strides made in operative dental surgery during the last few years, and the complex conservative operations which are now undertaken, that two years is all too short a time in which to master the rudiments of the work, and as a few moments ago I was pleading for the proper teaching of the mechanical part of the work, let me now urge that if three years be necessary to master the one part, surely it cannot be considered too long a period to learn the other. The institution of a lectureship on operative dental surgery would enable the lecturers on dental surgery and pathology to devote more time to dental surgery and pathology pure and simple, which in common with the other branches of our profession have so much enlarged their bounds of late years. Such is my ideal of a curriculum for our dental student. Taken in the manner suggested it would

require six years to complete it, which will be regarded by many as an objection, but if the preliminary examination be passed at the age of fifteen or sixteen, and the three years' workshop training commenced then, you will see that it is quite possible to complete the whole by the 21st or 22nd year.

The arrangement I would suggest is somewhat as follows:—The first three years to be spent in the workshop, then the classes to be taken in the following order:

Fourth Year.—Chemistry, anatomy, physiology, practical chemistry, practical physiology, dissection, dental hospital practice.

Fifth Year.—Surgery, medicine, materia medica, clinical surgery, dental anatomy and physiology, dental surgery and pathology, dental mechanics, dental hospital practice.

Sixth Year.—Dental anatomy and physiology, dental surgery and pathology, dental mechanics, metallurgy, operative dental surgery, dental hospital practice.

So much for the curriculum. I now wish to say a few words on the examination; and it is here that, from the student's point of view, the necessity for improvement in our system of education is most necessary. For all practical purposes the examination remains the same as at the passing of the Dentists Act, now nearly ten years ago. And what is the condition of affairs? You have heard enumerated the subjects the student at present has to take up. Well he is expected to go up and subject himself to examination in all of these nine or ten distinct branches of learning at one and the same time. It is true that he has only four papers set him, viz., one on anatomy and physiology, one on surgery and pathology, one on dental anatomy and physiology, and one on dental surgery and pathology, but on the other hand, the oral examination *professedly* ranges over all the subjects of the curriculum, and if the examiners do their duty at all thoroughly, in taking up all these subjects, the wonder is that any student ever comes successfully through the ordeal. In addition to the written and oral examinations, there is a practical examination at which the students are required to show their ability in stopping teeth, with gold and other materials. Now this system of examination is open to three grave objections. *Firstly*—That it embraces far too many subjects for any one man to have thoroughly at his finger-ends at once; or it may be added for any examiners to conduct a thorough examination upon, in the time allotted for the purpose. *Secondly*—In the majority of these subjects there is

only an oral examination. Now, it is a well known fact to all who have passed through student life ; that there is a certain percentage of men, and good men too, who from nervousness, shyness, or other constitutional defect, do not shine at oral examinations, and it is very desirable to have paper work as well as *viva voce* to give every one as equal a chance of passing as possible. The *third* objection is that the practical examination, while very good in its way, does not go far enough. What then is the remedy ? An extension of the system already adopted by the Scotch and Irish licensing bodies at their dental examinations ; viz., division of the examination into two or more parts. Taking the curriculum I have sketched above as the base of operations, I would suggest that at the end of the student's fourth year should be held, what we might call the first examination, embracing the subjects of chemistry, anatomy, and physiology ; and the examination should be both written and oral. This division of the examination already obtains at Edinburgh, Glasgow, and Dublin, and the passing of it is, as I can testify, a great relief to the load of knowledge the student has to carry up to the final examination. This being passed I would further propose at the end of the student's fifth year, that the second examination should take place, taking up the subjects of surgery, medicine, and *materia medica*, and to be written and oral as the first examination. This would allow the student to devote the whole of his last year to the special dental subjects, and I may remark in passing, that one of the strongest arguments that can be urged for a dental student taking the double qualification in medicine and surgery under present conditions is, that if he takes these qualifications first, he has at the dental examination only to answer the questions put by the dental side of the Examining Board, and thus is enabled to devote the whole of his two years, after passing the L.R.C.P. and M.R.C.S. to special dental work. At the end of the student's sixth year would come the final examination, which should embrace all the special subjects and be written and oral. But in addition to this a large extension of the practical examination is desirable. What is to prevent the examiners from following the example of the Glasgow Board, and by arrangement with the authorities of the two dental hospitals in London, turn the regular students out for a day at examination time and put in their places the candidates for examination ; let each man take what falls to his lot, and shew what he can do, in extraction, stopping, scaling, and the

numerous miscellaneous cases which crop up in an ordinary morning's work at a dental hospital. Let the examiners also spend an evening in the laboratory, and test the knowledge of the candidates in the practical working out of the details of mechanical dentistry.

I shall be told that there is one great drawback to all this, and that is the expense which so many examinations would entail; but that might be met by an increase in the examination fees, and surely is as nothing compared with the desirability of turning-out thoroughly good, well-trained, all round men. Our profession will not be raised in status by legislation from without. It is upon the quality of the men within it that its position depends, and it is by steadily improving in every possible way the education of those, who will be our successors, that we shall surely procure for it the position which we all desire to see it occupy among the learned professions—"second to none." In the earnest hope that these somewhat crude suggestions may in however small a measure, contribute to this end, I have brought them before you, and I trust that the ball thus set rolling may be kept moving until some good work is accomplished in the cause of dental education.

Mr. MATTHESON said he felt the L.D.S. examination as it was, was not as it ought to be. At the same time the idea of taking a surgical degree in addition would not make things much better. With regard to what Mr. Nicol said about the importance of three years' mechanical training he was entirely with him; not only did he think it was important as a preliminary training for operative work afterwards, but he did agree that a man who did his duty as a dentist must do a great deal of work himself, and must, at all events, be able to do all he directs his assistant to do. With regard to what was said, also as to the importance of devoting a longer time to operative work he there again agreed with Mr. Nicol, and he felt one ought not to grudge six years in the attainment of skill, which could only be attained by careful and prolonged education. They heard already, as things were, men occasionally grumbling that they or their sons, had to undergo such a long period of education, but if dentistry was to be what it ought to be, they must face that and be prepared to meet it. They must be prepared to give not only time, but expense to attain the proper amount of training. If such a scheme as Mr. Nicol had proposed were ever to be actually formulated and established—and he hoped the day was not far distant when perhaps that

might be so—might not an opening be made for it in such a direction as was indicated by their president in his address that morning? That was to say in the direction of a higher dental degree. It seemed to him that it was in that direction they might look, whilst it would be almost quixotic to expect any of the authorities to make any radical reform it did not, he thought, seem impossible that they might not be willing to entertain some idea of making a higher dental examination comprising such reforms as Mr. Nicol had indicated, and which should stand to the L.D.S., in the same relation as F.R.C.S. to M.R.C.S.

Mr. WILLIAM HEADRIDGE said he was very pleased to hear the remarks of Mr. Mattheson upon the paper. It was a paper which had been very much wanted. It was pointed and thoroughly practical. He feared the rising generation were a long way short of those who had been before them. There was not the same amount of education in the mechanical art. They were very fond of machines to do the work, and he might say that a great deal of the mechanical work of the present day was almost a disgrace to the profession. He should be very pleased to see six or seven years fixed for acquiring a knowledge of the profession. He should be very glad to find that in the examination of the student there was greater strictness in seeing that his mechanical training was better developed than it had hitherto been. The student would be a better operator, and would finish his work in better style, and exhibit a more masterly hand in it. He hoped the time was not far distant when the dental profession would point out to the colleges the necessity of working out a closer test, either for a higher degree, or to see that the student was better turned out.

Dr. WALKER said they undertook to teach their pupils mechanical dentistry. Now, as practitioners, did they teach them? Not one in twenty had been competent to sit down to their bench begin and complete one single piece of dentistry. Yet they came to London to learn the profession before having acquired the mechanical art. They must make their boys mechanics before they made them surgeons. They endeavoured to teach both theoretical and practical dentistry in two short years. Let them make their lads learn mechanical dentistry in four years.

Mr. NICOL in replying, said he had only to thank them for the very kind way in which they had received the paper. He had at first thought of saying four years mechanical work should be required, but he thought it might be considered too much by a

good many people. He was glad to find such an authority as Dr. Walker agreed with him in the matter.

Mr. F. HARRISON read a paper on "Cases in Practice," which will appear in a subsequent issue of the Journal.

VOTES OF THANKS.

On the motion of Mr. J. HARRISON votes of thanks were tendered to Mr. Glaisby for the reception he gave at his residence, and to the President for having entertained them at luncheon that day. The President suitably responded.

The Conference then terminated.

THE ANNUAL DINNER.

In the evening the annual dinner of the Association was held at the Station Hotel, the President (Mr. T. E. King) occupying the chair. There was a good attendance of members, and among others present were the Lord Mayor (Mr. Alderman Rymer), Sir Joseph Terry, the Very Rev. the Dean (Dr. Purey-Cust), Major Cooke-Collis (Deputy-Assistant Adjutant and Quarter-Master General, Northern District), Dr. North (Medical Officer of Health), Dr. Jalland and Mr. Councillor Tripp.

The PRESIDENT having briefly submitted the toast of "The Queen and Royal Family," called upon Dr. Walker, who proposed "The Army, Navy, and Reserve Forces." Major Cooke-Collis replied on behalf of the "Regular," and Major Rogers for the "Auxiliary Forces."

Mr. W. GLAISBY proposed "The York Medical Charities." He ventured to think that that toast would be most heartily received by them all, embracing as it did the York Dispensary and the York County Hospital. Medical science and medical skill were both good, noble, and wonderful in themselves, but when freely and voluntarily given they evoked their warmest and highest thanks. Many of the poor and suffering in that neighbourhood had every reason to thank the medical skill and tender care they received from these excellent institutions. That being so, they should command the assistance and support of every one who could contribute to them. What nobler object could philanthropy desire than the help of such institutions as these? The York Dispensary and Hospital had done a noble work in the past, and would do so in the future. He ventured to think that neither

institution ever possessed a more efficient staff than at the present moment. He had much pleasure in calling upon Mr. North to respond.

Mr. NORTH said, in returning thanks for the medical charities, that although the charity of which he had the honour to be an honorary officer had existed for more than a hundred years, yet the County Hospital pre-dated it considerably, and therefore ought to have taken its place in that toast. He believed himself that the medical charities had, for a long period of time, in this county, in an unostentatious way, but still a valuable way, done an incalculable amount of benefit to the suffering, both as ministering to the suffering in distress, and in general teaching. Both the institutions for which he returned thanks held honoured positions. One of the last and best additions which he thought had been made to the medical charities had been the addition of a dental surgeon. He thought the medical profession would be the first to acknowledge the advantages they received from the dental gentlemen in many of the cases they had before them. The public at large were equally benefited. He was happy to say, at all events on the staff of the dispensary, they might take precedence in a spirit of liberality in placing a dental surgeon on the staff as one of the board of directors. They felt in Mr. King one who in an eminent degree deserved that position. When he was appointed, he (Mr. North) took upon himself to say that the right thing to do was to place Mr. King with the rest of the medical staff.

Sir J. TERRY said he had received an intimation that he would be expected to propose the toast of the Archbishop and Clergy of the diocese (which had been delayed pending the arrival of the dean). He had very great pleasure in doing so, and he would only say that whoever was deputed to propose that toast should be of similar eminence to the Archbishop himself, but as that was a somewhat difficult matter they would probably forgive him for doing so. For a quarter of a century the Archbishop had carried out the duties imposed upon him in connection with the northern province, and those who had observed him most would recognise that he had at all times been stimulated with that necessary zeal for the discharge of the duties of that important office. He had pleasure in submitting the toast.

The Very Rev. the DEAN of YORK responded, and said there were a great many things he knew the Dean of York ought to do and which he did not do. But there were certain things he did

not do for the simple fact that he could not do them. Amongst others was the capacity of being in two places at once. If he had only possessed that he could assure them he would have been there at the commencement of that banquet and enjoyed that table. As he could not do that the best thing he could do was to come in as quickly as possible and take part in the social enjoyment. It was not always an easy thing to respond for absentees, especially without their sanction, but he was quite sure he might on behalf of the archbishop and clergy offer their thanks to them for the kind way in which they had proposed their health that night. He hoped the clergy would never give the laity cause to lose their goodwill. He felt the clergy owed them a debt of gratitude for the good and beneficent work which was carried on by the body that gathering represented. He was sure many of the clergy besides himself felt that they had received substantial benefit from gentlemen of the dental profession, not only for relief accorded in times of distress and suffering, but also for the great help which was given to them towards the enjoyment, under God's blessing, of that good health which enabled them to discharge their duties and which contributed to the happiness of life. He did not think people considered how much their health of body and, he might say, of mind, depended upon the attention and the care which they received from that learned and invaluable profession. He would only offer to them, as far as he was concerned, a hearty welcome to that ancient city of York, and say what pleasure it would give him to show them all the objects of interest and beauty in the Minster.

Mr. W. H. JALLAND proposed "The British Dental Association and Branches." He said medical associations and like branches had other objects in view besides the mere advancement of their own profession, and one was the good fellowship between them. He could not help thinking that festive gatherings like that materially helped in that view. Sometimes discussions were raised and carried on with hard words. After a dinner of that kind one was better able to look upon the shortcomings of a neighbour than before. The British Dental Association was a comparatively young one, but they hoped they had many years of useful work before them. He did not think they would do a bad thing if they followed the British Medical Association, and he hoped they might have equal success.

Mr. F. CANTON in replying said he was sorry he did not hear

their president's address. The provinces were far more represented than London on the Representative Board, and the British Medical Association had been the basis of the organisation of that Association. It was now five years since he took an active part in that Association, and during that time the number of members had doubled, and the number of branches more than doubled. He thought those facts showed that it had been a success. That he attributed very much to the success of their *Journal* which, he thought, now stood amongst the first professional periodicals of the day. He thought they were indebted very largely indeed to certain gentlemen who conducted the *Journal*, and for the immense amount of time and labour they gave to it. Errors of judgment might have appeared from time to time, but if that body had not been a non-elective one he thought these errors would have been the rule and not the exception. He would like to remind members that one of the chief objects of the Association was the maintenance of the spirit of the Dentists Act.

Mr. W. BOOTH PEARSALL also responded and said he was a provincial member of the Association, and he could assure them that any energy he had thrown into the office of Secretary of the Irish Branch he had done with pleasure. He heard the President's address at the meeting, and he completely dissented from some of the expressions therein. So long as the headquarters of the Association remained in London so long must certain men carry on the work of the Association. He esteemed the man who hit hard when it was necessary. He had the honour of organising the coming meeting in Dublin, where they would be received with "cead mille failte"—a hundred thousand welcomes. They would do their best to make the meeting not only a social, but what was far more important, a scientific success. If they were going to make their profession any use to the nation they should sink their minor differences and pull heartily together for a common policy, and he thought they need not have the slightest hesitation in subjecting themselves to the tender mercies of the Irish Channel, with the prospect of a good meeting to interest them and a hearty loyal welcome to greet them in Dublin.

Mr. G. G. CAMPION proposed the toast of "The Benevolent Fund."

Mr. E. J. LADMORE in responding, said the fund was in a very low state indeed.

The "hat" was sent round, and it was announced that the sum of £10 3s. had been collected.

Mr. H. BLANDY then proposed the toast of "The Lord Mayor and Corporation of York."

The LORD MAYOR and Mr. COUNCILLOR TRIPP having responded, Mr. WAITE proposed the health of the President. He said that ten years ago, the most sanguine man in the dental profession would not have ventured to foreshadow such a meeting as they had had here to-day. There were two aspects of this awakening that were peculiarly gratifying, viz., That it pertained chiefly to the provinces, and again, that it was rapidly laying hold of the younger men. Surely nothing could be more grateful to the minds of those who in years past have borne the burden and heat of the day, than to see their labour appreciated, their efforts sustained, and their hopes carried forward into fruition by the ability and energy of those who follow after. It is a noteworthy fact that the Presidents of five of the Branches at the present time are comparatively young men, who have won their way to the front rank by dint of well-discovered ability and indomitable energy. This to his own mind was the most hopeful feature of the British Dental Association. If the young members, who have enjoyed advantages (such as the older never dreamt of), do but realise their privilege, and grasp their opportunity with vigour and earnest resolve, there may yet be the possibility of a brighter hope for the future. The machinery is constructed, the lines are laid, all that is required is power, energy, determination, patience and faith.

Mr. King had hesitated to assume the responsibilities of the presidency, but he felt that no officer of the British Dental Association had displayed more untiring energy in behalf of the Association than the gentleman who now sat at the head of the table. Mr. King had done the very thing they all felt ought to be done, but which they *all*, more or less, shrank from doing, viz., put forth *personal effort* to enlist members, sacrificing his time, money and convenience, in order to persuade his brethren of their own interest, and he has succeeded in adding to the list of members between thirty and forty names. Besides this, Mr. King had disclosed to them to-day, in his vigorous address, an amount of perception, and grasp, and insight as to dental politics, which peculiarly fitted him to occupy a prominent position in the British Dental Association, and while they honoured his name because of the long sustained, and unblemished reputation of an esteemed father, they were still more proud to see the son, not only maintaining, but advancing and extending the influence, the accumulated influence, of a pro-

longed and honourable career. With their permission, he would add to this toast the name of Mr. W. Glaisby. Many of them attended his handsome, and hospitable reception last evening, and they would be able to estimate the zeal and energy he had exhibited in connection with the meeting. He called upon them to drink the good health and long life, and continued prosperity of their worthy President, and of Mr. W. Glaisby.

The PRESIDENT said it was very gratifying to his feelings to hear Dr. Waite speak of him as he had done. It was their duty to make themselves useful, and it was satisfactory to know that no one failed to do his best. He should like to take that opportunity of expressing his deep sense of gratitude to Mr. Walter Glaisby, to whom much of the success of that evening was due.

Mr. GLAISBY said he was extremely pleased to find so many members and friends accepting his invitation to the reception. He thanked them most sincerely, and he hoped if what he had done had been appreciated that members in other towns would follow the example.

The proceedings then terminated.

VISIT TO THE MINSTER.

On the Saturday morning the members and their friends assembled at the offices of Terry's Confectionary Works, and by the kind permission of Sir Joseph Terry, the head of the firm, they were conducted over the works. They then proceeded to the Minster where, according to promise, the Dean received them and personally explained the numerous objects of interest. During the three days' visit of the members the grounds and museum of the Philosophical Society were thrown open to them free of charge.

Scottish Branch.

THE sixth annual meeting of the Scottish Branch was held in the rooms of the Dental Hospital, 30, Chambers Street, Edinburgh, on Friday, the 15th ultimo. There was a good attendance of members.

ANDREW WILSON, L.D.S., President, occupied the chair.

The SECRETARY read the minutes of the previous meeting, and the Treasurer presented a most favourable report; after which the office bearers were re-elected. The Council were also returned

to office with the addition of P. S. Walker, Dundee, vice J. Wells, Berwick-on-Tweed, resigned.

The Secretary then submitted a report of Council business transacted during the past year, from which it appeared that several complaints had been received regarding persons infringing the Dentists Act. Most of these complaints were either of an anonymous nature, or the evidence offered was of such a slight character that no action could be initiated.

A proposal for the amalgamation of the Scottish with the West of Scotland Branch was then submitted by BOWMAN MACLEOD, and, after some discussion, was remitted to the Council with powers to negotiate with the Western Branch.

The Secretary then submitted some information regarding the meeting of the Association in August, which he had obtained on a recent visit to Dublin, describing the excellent room accommodation and the thoroughly systematic and genial arrangements which were being made for a successful and enjoyable meeting.

Mr. CAMPBELL exhibited a new wall bracket engine to be used in connection with water or other motor.

Mr. P. S. WALKER, of Dundee, exhibited several improvements on the hand-piece and arrangement of the arm of the burring engine, also an ingenious hot-water chamber, with flexible tube and nozzle, for thoroughly and quickly removing the wax from the flasks.

At this stage the time at disposal was exhausted, and it was moved and agreed to adjourn the meeting till after dinner.

The members re-assembled in the Balmoral Hotel at 6.30, Mr. Price, of Glasgow, doing the honours of the chair, and Mr. Wilson, Edinburgh, those of croupier. Dinner having been partaken of, the usual loyal toasts were given, and thereafter the unexhausted business was substituted for the ordinary after-dinner speeches. This arrangement was found to be eminently successful, and more enjoyable than the ordinary routine.

Mr. PRICE read a paper on "The Present State of the Dental Register," a report of which will be found on page 447.

A pleasant conversational discussion on the subject then followed, and the following resolution was passed:

That this meeting of the Scottish Branch begs to call the attention of the Representative Board to the large number of men, who, since 1882, have been placed upon the Register under Clause II. Section 37, and asks the Executive to use its influence with the General

Medical Council to deal more stringently with future applications for admission to the Register under this section.

The company then took up the consideration of "Higher Dental Education," the conversation resulting in the following resolution.

That the Representative Board be asked to approach or take such steps as are open to them to move the Commission in connection with the Universities (Scotland) Bill to empower the Universities to institute a degree in dentistry.

Songs, pianoforte and French horn solos varied the proceedings, which were brought to a termination shortly before eleven p.m.

Southern Counties Branch.

THE Annual Meeting of this Branch was held at Southsea, on Saturday, June the 23rd. There were present Alderman S. L. Rymer, Croydon (out-going president); J. Cornelius-Wheeler, Southsea (president-elect), F. J. Van der Pant, Kingston-on-Thames; Felix Weiss, London; W. B. Bacon, Tunbridge Wells; James E. Welch, Brighton; Morgan Hughes, Croydon; T. W. C. Wonfor, Brighton; Robert E. Feltham, Brighton; J. H. Redman, Brighton (hon. treasurer); Dennant, Brighton (hon. sec.); W. Barton, Eastbourne; W. George Daish, Ryde; Martin Henry, Folkestone; F. C. Mortimer, Portsea; Walter Williams, Eastbourne; J. H. Reinhardt, London; Thomas H. Elliott, Brighton; Alverston Gabell, Redhill; Alfred F. Baudry, Southsea; John Ellis, Sandown; Horace O'Colyer, Ryde; T. S. Silvester, Croydon; T. S. Foster, Portsmouth; Stainer, Southsea; Campbell Adams, Croydon; George Cunningham, Cambridge; James Smith Turner, London (President of the Representative Board); Arthur S. Underwood, London; and Arthur F. King, Southsea (local hon. sec.) &c., &c. The visitors included Drs. J. Ward Cousins, C. Knott, R. E. Sparrow, and Guillemard, and Surgeon-Major Crowe, A.M.S.

The SECRETARY having read the minutes of the last annual meeting, which were confirmed, he read the annual report, as follows:—

In presenting their Second Annual Report, your Council are pleased to note the steady progress of the Branch during the past year.

Within the year seventeen members have been added to its

roll, twelve of whom have been thus elected members of the parent Association.

The number remaining on the books is sixty-five. The Autumn and Spring meetings held at Brighton on the occasion of meetings of Council, were attended by twenty-six and twenty-two respectively, which shows an increase on the attendance of the previous year. On these occasions the discussions have embraced a great variety of topics, and have been free and practical in their character, and the best thanks are due to those members who have taken an active part in these proceedings.

Your Council refer with pleasure to the last annual meeting at Croydon, as having been most successful and enjoyable, the result being due, in a large measure, to the genuine interest and hospitality displayed by their respective President, Alderman Rymer, and the thoughtful care and attention of their local Hon. Sec., Mr. Morgan Hughes, both of whom are deserving the heartiest thanks of this meeting.

As a result of that meeting we have met this year at Southsea in the month of June instead of July, under the happy auspices of Mr. Cornelius-Wheeler as our President.

One of the first duties under his presidentship will be to decide on the place of the annual meeting for 1889, and the election of officers for the coming year.

After due consideration, your Council are prepared to recommend that as meetings will now have been held in Sussex, Surrey, and Hampshire, the next annual meeting be held in Kent; and have decided to advise that Tunbridge Wells be the place of meeting (as being a delightful and accessible spot), and that Mr. Bacon be the President-elect.

In addition to the offices of Vice-President, Hon. Treasurer, and Hon. Secretary, it will be necessary to supply the vacancies created by the retirement from the Council of Messrs. Van der Pant, J. H. Whatford and Welch. The ballot was decided upon as being the fairest method of determining who should retire; and, as it happens, your Council are thus losing some of their most active members, but, being eligible, they have consented to offer themselves for re-election. In doing so, it must be clearly understood that no attempt is made to interfere with the perfect freedom of election at these meetings, and that members are fully entitled to nominate others if they wish to do so.

Your Council desire to refer to the difficulty they feel in reach-

ing the more remote parts of the wide area of this Branch. They would be glad to receive indications from members living in the outlying parts of the district as to any desire for an occasional meeting of an informal character in their neighbourhood.

They hope to arrange such visits from time to time, and have decided to hold a meeting at Hastings, if possible, during the month of September.

During the past year a considerable effort was made to improve the condition of the Register. We, of this Branch, have endeavoured to assist in this work. Hence will be found in the financial statement an item for death certificates. It is hoped that those members who have undertaken to look after the Register, with regard to deaths and removals, will execute their task as early in the autumn as possible. It is very desirable that all our members should readily assist in this work, and impart the special information required either to your Hon. Secretary, or direct to Mr. Miller, the Registrar of the Medical Council.

It would greatly facilitate business if members would kindly pay their subscriptions punctually. We are only entering on the third year of our existence, and yet there are arrears, and this interferes with the necessary completeness of the treasurer's accounts. Still your Council are happy to report that the finances (but for this circumstance) are in a satisfactory condition. With a considerable balance in hand, the Council would be able to recommend a substantial donation to their Benevolent Fund; as it is, they do not like the occasion to pass without suggesting that £5 5s. be sent to that fund.

In consequence of the exhausted state of the Benevolent Fund for the current year, an appeal was made to your Hon. Sec. by Mr. Brown-Mason, of Exeter, on behalf of a widow and children of a respected practitioner in the west of England, who died at a comparatively early age. The case was found to be most deserving, and having been mentioned at our last meeting, a sum of £6 5s. 6d. was there and then collected, and has since been gratefully acknowledged.

In conclusion, your Council would appeal to the members throughout the Branch, to bring the claims of the Association persistently before their professional friends, until, by their influence, they have included every honourable practitioner in the south of England.

The CHAIRMAN moved the adoption of the report, remarking

that it gave him great pleasure to do so, because it showed that they had made a decided advance in the course of the last twelve months. The number of members had increased largely, for they had elected within the year seventeen, and he believed there were three new members to be proposed for election later on in the day ; that in itself showed that they were growing in strength, and, considering the limited proportions of the dental profession, it was, indeed, a large and important increase. He hoped that in the course of the next two or three years, every professional man who was a dental practitioner, who was worthy of the name, in the Southern Counties Branch, would enrol himself on the list of members. Allusion was made in the Report to the improving and perfecting the Dental Register, which they would all agree, was of very great importance. It had been taken in hand resolutely, and their friend, Mr. Waite, had taken very great interest in it. Various branches had assisted him in the work, and a great deal had been done in their own Branch, and he believed the Register had been immensely improved. If the work went on it would tend very much indeed to the elevation of the profession. With regard to the Dental Benevolent Fund, that was a work of assisting their poorer fellow-practitioners—a work that everyone present would feel an interest in ; and the hint given as to the forgetfulness of certain members in forwarding their subscriptions regularly to their worthy treasurer, would not be lost sight of. It only required the regular payment of subscriptions to enable them to aid the Benevolent Fund in the way they would like. As it was, the Council did not feel justified in recommending the members now to make a larger donation than £5 5s. That was something, however, and he was pleased to advise that it should be done, and if the report was carried, that donation would go forward in due course. The subject of the locality of the meeting next year had engaged the attention of the Council, as the report stated, and after thoroughly weighing the different points suggested, the Council came to the conclusion that it would be wise to advise that Tunbridge Wells should be selected as the place of annual meeting next year. They had not yet met in the county of Kent. It was a beautiful neighbourhood ; they had some worthy members there, and they had a very energetic and active member in Mr. W. B. Bacon, whom they recommended as president-elect for the year. The financial statement was, on the whole, satisfactory, and only required the little attention he mentioned just now to make it

entirely so. He had pleasure in moving that the report be received and adopted.

This was seconded by the President-elect and carried.

The PRESIDENT, in vacating the chair for Mr. J. Cornelius-Wheeler, said that two years ago they did him the great honour of electing him the first president of the Southern Counties Branch of the British Dental Association, and he could assure them that he thoroughly appreciated the compliment. They might have elected one who would have fulfilled the duties of the office more efficiently than he had done; at the same time they would not have elected one who felt more interested in the work of the Association. It had been to him a source of very great pleasure to find their several meetings so well attended. Many gentlemen had heard of each other within the four counties represented by the Southern Counties Branch, but had never seen one another. The meetings that had been held had brought them together, and they had had the pleasure of making the personal acquaintance of those of whom they had only heard before. He believed that such meetings tended to good fellowship, and also to professional and scientific advancement. The work of the year had been generally satisfactory, and it was mainly owing to the great interest and persevering endeavours of the worthy hon. secretary that such had been the result. Whatever success had been achieved, he attributed to Mr. Dennant's exertions in a great measure, but not entirely, because they had had the assistance and advice of an excellent Council who had throughout taken a great interest in the work. Their financial department—the sinews of war—had been looked after by Mr. Redman, with all the care that he could possibly bestow upon it, and he was sorry that his success in that department was not quite what he deserved. It only needed to be made known to the gentlemen who had forgotten to communicate with him, the desirability of prompt payment and it would be met, and no doubt the observations of to-day would bring it home to their friends who had so far allowed the matter to slip their memory. He trusted, however, that the attention of the parent Association would be directed to certain cases of disreputable practice which had been more or less successful. There was one point he thought it necessary that the Representative Board should take in hand now or in the near future, and that was the question—the very annoying question—of comparatively a new class of humbug that had sprung

up in the last two or three years under the name of American Dental Institutes. They found men associated together, according to their advertisements, with certain degrees, some of no value whatever, not worth a snap of the finger ; although some people when they heard of an American doctor, had an idea that the qualification was worth something, whereas they knew it might be worth nothing. There were other diplomas such as those of Michigan and Harvard, which did indicate proper qualifications, and were registrable in this country as qualifications for American dentists. He understood that there were some gentlemen who had taken these degrees, and allowed their names to be so debased as to appear in the lists of the American dental institutes. It was a great, an outrageous scandal, and if the Representative Board were to consider the matter, it was very likely they might see their way in going to the authorities of those Universities with a view of doing something to bring these men to book. With regard to another point, as to the position they occupied as a comparatively young branch of the British Dental Association, the question had arisen as to whether they felt sufficiently strong to invite the British Dental Association to hold their next annual meeting within the area of the Southern Counties Branch. It was a matter, he might mention, that had been under the consideration of the Council, and, after due deliberation they had come to the conclusion that there was so much pluck in the Southern Counties that they considered they were strong enough to make the invitation. It would be a distinguished honour to have the British Dental Association visiting them, and no doubt Brighton would be the centre, as having the largest number of members, to which the Association would be invited. It would be a great satisfaction to the Branch generally if the invitation were accepted, and therefore a resolution had been come to, authorising the secretary to communicate with the British Dental Association, giving them the invitation. It was desirable, if the invitation was accepted, that each and all should do their utmost to make the gathering a success. It would involve some expense. It was usual, when the Association was invited by any branch to raise a fund to defray certain expenses of excursions, entertainments, and receptions, and the course had been for each member of the branch whence the invitation was issued to put down towards the fund whatever he thought proper, and to that extent he would be liable but no more, probably less would be required of him, according to the expenses.

It only remained for him now to thank them right heartily for the honour they had done him, and for the consideration they had always accorded him during the course of the last two years. He appreciated highly all the kindness he had received, and in retiring from the chair he had great pleasure in introducing the new president, Mr. J. Cornelius-Wheeler. In Mr. Cornelius-Wheeler they would have, as president, a gentleman whose high character and professional attainments were known to them all and whom they would heartily be pleased to support during his term of office.

Mr. Rymer then shook hands with the newly-elected president, who then took the chair.

Mr. WEISS proposed that a hearty vote of thanks be given to Alderman Rymer for his valuable services to the Southern Counties Branch of the British Dental Association during the two years of his presidency. He said the resolution needed only to be brought before them and it would be seconded by the whole assembly. They all knew how heartily Alderman Rymer entered into all that he put himself to do. They knew how conspicuous his energies had been in the past, and how spontaneously he had acted as a consistent, enthusiastic and sensible reformer. He made these remarks advisedly, though in an assemblage like that they had only to be made to be received. He should have hardly thought it necessary to say more except that allusion had been made to the work which was now before the Representative Board of the British Dental Association, who were endeavouring to check the disgraceful frauds that were being perpetrated upon the public. He was fully convinced that the Representative Board were always, and had been, mindful of their duty, but there were so many difficulties in their way. He would allude to only one, a small difficulty, but it would give them an idea of how strange their position appeared. They heard of men calling themselves members of the profession, but painfully disgracing it, and these men were supported by medical men of high reputation, by dignitaries of the church, and by the highest members of society, male and female. They issued circulars, and on these circulars appeared the names of those persons who recommended them. Now the very natural remark was made to him, "I cannot believe that Dr. So-and-So, or the Bishop of So-and-So, can be aware of the character of the persons they are recommending." He had simply to answer that he had written to these individuals years

ago and again lately, and his letters had made no impression. There were many reasons for asking men to be honourable and just and not to recommend without enquiry. If the man they recommended was worthy of recommendation, well and good, but if they were really deceiving the public and injuring society they should be asked to withdraw their recommendation, and even here they had not been successful.

The HON. SECRETARY seconded the resolution, remarking that Alderman Rymer had ably presided over them for two years. He, personally, was very grateful to him for making his work of secretary, onerous as it appeared sometimes to him, lighter than it otherwise would be. In starting the Association the name of Alderman Rymer was a tower of strength and had been a rallying point, helping them very much indeed in putting the Branch on a firm basis. He need not multiply words, for they would all be equally hearty in supporting the resolution, which he had the greatest possible pleasure in seconding.

The resolution having been carried,

Alderman RYMER replied. He thanked them right heartily for this very cordial vote of thanks. He did not deserve so much kindness, but he highly appreciated the compliment.

The PRESIDENT said his next duty would be to thank them for having placed him in that position. He had a rather difficult task in following their excellent friend Alderman Rymer, whom he had known for a great many years. When he first heard Alderman Rymer advocate reform, dentistry was very different from what it was now. A great deal had been done, but the reform was not complete yet, and the only way to bring about further improvement was to unite together. Unity was strength, and the more every member of the profession whom they recognised as a member of the profession—because it was not every man who called himself a dentist whom they recognised as such—saw this the more would they improve. They were glad to see with them every one who would conduct his practice in accordance with the bye-laws of the Society. Those who did this could join them and they would give the Society strength; and if there were faults and deficiencies in the Act they would have greater power to go to the proper authorities and get the Act amended. He thanked them for the handsome way in which they had received him, and said the next business was to fix the place of meeting next year. Tunbridge Wells had been suggested, and he did not

think they could go to a more agreeable place. If they went there and appointed Mr. Bacon their president, they would make a good selection. He proposed that the next meeting should be held at Tunbridge Wells, and that Mr. Bacon should be the president-elect.

Mr. REDMAN seconded, and the resolution was carried unanimously.

Mr. BACON, in reply, said it would give him pleasure to be president next year, and he trusted that they would all enjoy themselves as much at Tunbridge Wells as they had that day.

The HON. SECRETARY announced that the next business was to elect a Vice-President. It was very necessary that this office should be held by gentlemen who had had experience in the work of the Council. He had felt on other occasions that it was a pity that a man who had worked up to the chair of a society, and filled it for a year, should be required immediately to retire when his presence would be most valuable to the society. For that reason he proposed that they should elect Alderman Rymer as Vice-President.

Mr. REDMAN seconded.

The resolution was carried unanimously, and Alderman Rymer briefly replied.

The PRESIDENT said the next duty was to elect the Chancellor of the Exchequer. Mr. Redman had carried out his duties as Treasurer satisfactorily, and he proposed his re-election.

Mr. BACON seconded, and the resolution having been carried, Mr. Redman said he thanked them for the compliment.

The PRESIDENT said they knew what a valuable officer Mr. Dennant was. He made a most excellent Secretary, and he proposed his re-election.

Mr. BACON seconded, and the proposition was agreed to.

The HON. SECRETARY said he thanked them for this renewed mark of their confidence, but in accepting office for the coming year he must intimate that at the close of the year he would have to ask them to be good enough to appoint his successor. He would then have been in office three years. Further, he did not like to usurp the position because other men, equally willing, and much more able, would be ready to step into the office. It was not desirable, in the interest of any association, that one man should hold office too long. He had seen the evil of it in many cases, and wished to avoid it in his own. Then consideration for his health and his hard work forced him, in the interests of his family,

to consider himself a little. He hoped, therefore, at the end of the year they would appoint a much more efficient man. They had now to elect three members to the Council. They had heard in the report how the question of retirement was decided by the ballot, but they happened to ballot out three of their most active members. Several others, living at a far distance, would have gladly retired, but they thought it would be fairest to rely upon the ballot. It would be a good thing if they could unite in electing these three gentlemen at once. At the same time he wished to state that he was quite ready now, and so was the Chairman, to receive the nominations of any other gentlemen in the room. Next year they would probably have to come upon fresh men; but he would now propose that the three retiring members of the Council be re-elected.

Mr. BACON seconded.

The HON. SECRETARY said he hoped that any gentleman who objected to the mode of procedure would at once speak out, because it was, perhaps, a little exceptional.

The PRESIDENT said they would all be glad to see the three gentlemen back again. He would support their nomination.

Messrs. Van der Pant, Whatford, and Welch were then declared re-elected.

The HON. SECRETARY read the following letter :—

SCOTTISH BRANCH.

16, George Square, Edinburgh,
June 20th, 1888.

THE SECRETARY SOUTHERN COUNTIES BRANCH.

DEAR SIR,—During a short discussion at the Annual Meeting of the Scottish Branch, held June 15th, on higher dental education, a suggestion was thrown out by Mr. Mackersy, our legal adviser, which was embodied in the following resolution :—

“That the Representative Board of the British Dental Association should be asked to approach, or take such steps as are open to them, to move the Commission appointed in connection with the Universities (Scotland) Bill, to empower the Universities to institute a Degree* in Dentistry.”

Mr. BROWNIE, of Glasgow, moved this resolution, and it was seconded by Mr. CAMPBELL of Dundee, and unanimously approved. I was instructed to send you a copy of the resolution, and ask you to kindly lay it before the members of your Branch at its Annual Meeting on the 27th inst., in the hope that the members would give it their

* This is understood to mean a higher degree than the L.D.S.

consideration, and see their way to support it when brought before the Representative Board.

Although the resolution is confined to Scotch Universities, these being the only ones at present under transforming legislation, you may be sure if once a degree in dentistry was established, the English Universities would not rest until a similar privilege was conferred on them.

I am, dear Sir, yours truly,
W. BOWMAN MACLEOD, *Hon. Sec. S.B.B.D.A.*

ALDERMAN RYMER said he had very great pleasure in moving a resolution on the subject of the letter, and he entirely agreed with the views therein expressed. He thought it was highly important that they should do all they could to promote and elevate the profession. There were no University degrees for Dental Surgery in Great Britain or Ireland, because the Licentiate in Dental Surgery qualification was not a degree, degrees being only granted by the Universities. Therefore he thought the Scottish Branch was deserving of all support. He proposed, "that this meeting of the Southern Branch of the British Dental Association approves the resolution passed at the meeting of the Scottish Branch, held June 15th, which asks the Representative Board to take such steps as are open to them, to move the commission appointed in connection with the Universities (Scotland) Bill to empower the Universities to institute a dental degree," believing such a course to be in every way advantageous to the dental profession.

Mr. CUNNINGHAM said that the public did not understand the differentiation between a degree and a qualification, though they as professional men did. Such a remark might, he feared, lead to misapprehension, but as a matter of fact a licentiate dental surgeon was a graduate of the College of Surgeons, and the difference between a graduate of the College of Surgeons and of the Universities, was simply the difference between different vested interests in educational institutions. If education were entirely under the State there would be no such distinction. He hoped they would appreciate that difference, and that they would not suppose he was opposed to the action of the Scottish Branch, because he was convinced that if the plan were carried out it would be a good thing. There was a good deal of difficulty in inducing old established bodies like the Universities to make any change, but at Cambridge they were trying in a little way to bring

this about, and that was by sending their sons to the University and giving them a B.A. degree. He believed, however, that the only way in which they could get a dental degree recognised was by adopting and supporting the action of their brethren across the Scotch border.

Mr. MORGAN HUGHES seconded, and the resolution was carried.

The HON. SECRETARY announced that he had received a great many communications, one being from their friend Mr. Pearsall, the Secretary of the Irish Branch. Mr. Pearsall had visited this country, scouring the Midlands and the North, and had reached London, all for the sake of the museum and getting it properly organised, in order that it might be a valuable adjunct to the great meeting in Dublin. His position was by no means an easy one just now; in fact, the position of secretaries generally was not easy. Most of them had received a Branch letter from him (Mr. Dennant), and he had hoped that it would have been taken by them as a personal communication, entitled to some measure of attention. But they would pity him when he told them that he had had only one favourable response, and that was from Mr. Daish, of Ryde, who sent some very interesting things; now he had some pleasure in the Southern Counties Branch, and desired to feel a little proud of it, and therefore he hoped they would support him in sending something worthy of the Branch to Dublin. He would thank any member who would, in the course of the following week, send anything he could to make his contribution worthy of the Branch; while, if members preferred it, they could send direct to Mr. Pearsall.

Mr. J. ELLIS showed photographs of a new chair that he had designed, which was worked by hydraulic power, and the model of a centrifugal pump attached to a lathe, the operation of which he described.

(To be continued.)

Eastern Counties Branch.

THE Annual meeting of the Eastern Counties Branch of the British Dental Association was held in Northampton on Wednesday, June 27th, 1888.

The annual dinner took place at the George Hotel, Northampton, on Tuesday evening, June 26th. Mr. Frank Hall, L.D.S.I., President-elect of the Branch, occupied the chair. The company

present included Messrs. Walker, London ; Waite, Liverpool ; H. W. Tracy, Bury St. Edmunds ; King, York ; J. Smith Turner, London ; W. A. Rhodes, Cambridge ; Dr. Milligan, House Surgeon, Northampton General Infirmary, Northampton ; George Cunningham and P. Lennox, Cambridge ; S. A. T. Coxon, Wisbeach ; W. Hodgkins Hope, Wellingborough ; Alexander Kirby, Bedford ; R. Payling, Peterborough ; Butler, Wilkins, and Sherwood, Northampton.

The usual loyal toasts having been proposed from the chair, and duly honoured,

The CHAIRMAN next gave "The Army, Navy and Reserve Forces." He spoke of the recent allegations respecting the unfit condition of munitions and equipments, and referred to the immense importance of skilled supervision and regular attention to the teeth, which our soldiers and sailors did not get. A thousand times it cried shame upon the country that no dental surgeon was appointed to barrack or dockyard, or ship, or regiment, or depot.

Lieutenant KIRBY having replied,

Mr. WAITE proposed the "British Dental Association." He said most of those present, being members, were acquainted with the aims and objects and working of the Association. He congratulated the Eastern Counties Branch on having members in every town and district, and although numerically a small Branch, comparing the number of practitioners with the number of members, being fully up to, if not above the average number of members that obtains in other branches. The question was sometimes asked, "What use was the British Dental Association, and what had it done?" Within his own limited experience he had never heard that question asked except by two classes of querists—those who had never joined the Association and were unacquainted with its working, and those who had joined but did not attend its meetings, and therefore did not enjoy its privileges or share its advantages. The question might be answered in two or three ways. The British Dental Association had brought together the best educated and foremost men in the profession in the United Kingdom, and opened up between them a channel of perpetual communication, and had joined them together by a bond of union which was formed on a permanent basis of professional dignity and mutual respect. It had done more than that ; it had promoted and established for them, in this United Kingdom, a Dental Journal which was certainly the best that they had, he thought, in Europe,

and, which, although still capable of improvement, had taken a position, second to none, among the professional journals in the United Kingdom. The Association was only, as yet, about nine years old, and the work hitherto had been of a very preparatory character. It could not possibly have been otherwise, and there was yet a very great deal to be done: but when they looked around and saw the number of meetings that were being held, and the number of gentlemen that were coming together, and the character and quality of the papers being read, and the discussions that were being carried on, they had every reason to congratulate themselves on the progress that had been made. Only about ten days ago he had the privilege of being present at the meeting of the Scottish Branch, at Edinburgh. At a dinner there, the idea was taken up, which was mentioned in the address of the President of the Midland Branch, Mr. King, who was with them that evening—the idea of establishing Dental Degrees in connection with the Universities. There were very formidable difficulties in the way, no doubt; but there was no doubt, either, about this, that if they were determined to press the matter they would accomplish it. The idea was a capital one; it would elevate the profession, and would give an impetus to young men with time at their disposal to pursue their studies into the higher branches of dental science.

Mr. J. SMITH TURNER in replying said: the Branches were really the Association, and he had much pleasure in being present at that meeting of the Eastern Counties Branch because it had boldly ventured, at some supposed risk of failure and considerable inconvenience into a town where the Association was entirely unrepresented. He was happy to say that that condition of matters had ceased, he understood now that they had a contingent of two members in the town which they would not have had probably had the Eastern Counties Branch not made Northampton the place of meeting. He need not moralise on that, but they would all remember the beautiful story of the piece of silver, and he thought if they did nothing more than they had already done by coming to that town, they would have achieved something worth coming for. The British Dental Association was still in the very earliest stage of its existence. A great deal had been expected from it, a great deal ought to be expected from it, but they ought not to expect that too soon. There was a law in natural life that the longer the period of parturition the longer the animal lived. He did not

know whether this law obtained with Associations, but he hoped that the period of parturition, and the period of infancy of the British Dental Association would not be forced, but that the Association would be allowed to grow gradually and slowly, as by that means, they were more likely to ensure a future of good for the Association. There were before them many things to accomplish, and there was a great deal of work to be done. Many of the members seemed to think that because they had got an Act of Parliament they ought to have been able by this time to have destroyed all of the abuses which attached to their profession. Probably members who expected that had not gone into the matter closely when they obtained this power—this very limited power of counteracting certain abuses; it was at the same time only that they acquired the power to legitimately call themselves a profession, so that the power and the birth of the profession came together. Although the power was to a certain extent in existence, the means to a certain extent were called into existence along with the profession, and it could scarcely be expected that this new-born profession would have the power to exercise these means to its satisfaction. They might have the birth of an infant Hercules from a father Hercules, and the father Hercules might bequeath his clubs to the junior Hercules, but it would take a long time for the junior Hercules to use these clubs to perfection. And so it may be with the British Dental Association. They wanted to put it straight. They wanted a lot of union, a lot of money, and a lot of legal advice and legal training before they could see their way clearly to use the powers that have been vested in them. Difficulties crop up at every turn; and these difficulties must be met, they cannot be brushed aside hastily as if they did not exist. They are real facts in the course of progress, and they had to be met and considered; and probably with serious consideration they might overcome many of them. But there was one thing they would never overcome, and that was the desire of the British public to be "gulled." If they looked back they would see that the mode of "gulling" the people in their profession had changed considerably. The papers swarmed now with advertisements; but it was within his recollection when they swarmed a great deal more with such advertisements, probably not in the provinces, because dentistry was not so much sought after in the country. But during the last thirty years, and he spoke from observation, he believed that advertising spurious modes of practice, quack

professions of achieving certain ends had materially lessened in the London papers. Their mode of attack had been entirely changed. The leading quacks, if he might so call them, were now approaching and aping a style of respectability that previous advertisers did not seek to assume. They were calling themselves doctors, they were trying to make people believe that they possessed degrees, and they were entrapping young men who had degrees into their service, and inducing them to serve them. Now that told a tale of the progress of the profession as a whole. If it were not so, these advertisers would not have to beat about and change their style of approaching the gullible part of the public so much as they had recently done. The medical profession was beset with quackery, but it was not so apparent to them, because long ago the medical profession assumed a higher position in the social scale and received more consideration from the public—because of the prolonged period of its education—than they had yet been able to obtain. And part of the future of the British Dental Association was to see that they arrived at such a position as that he had mentioned as belonging to the medical profession. The reason quackery was less apparent, was that it had assumed the respectable garb of the medical profession, but any medical man would tell them that it existed. It existed in every town, and he was sorry to say it was also assuming new methods—a compliment to the scientific progress which the medical profession had made no doubt. These quacks, these pretenders, recognise the scientific advance that the medical profession has made, and they obtain a *pseudo* scientific term. This quackery comes before the public under some such name as the Electric Belt Company, or the Electric Battery Company, as the Medico-Electric Company, or with some such specious term, and advertised that it was prepared to give advice, and probably some medical man was there as a kind of protection for them, and so they gulled the public in this way. And in the eyes of the dental profession quite as bad is the man who advertised his "Guinea Jaw." There was more money expended in advertising quack medicines in this country than was earned by the whole medical profession; and they were all, unconsciously perhaps, supporting the quack when they bought a patent medicine which they should be better without perhaps. They forgot possibly, that the pure medical man suffered ten times, nay, one hundred times more from quackery than they did, and had found that to put quackery down by law was impossible. There was a

society established some years ago called "The Medical Protection Society." It was dissatisfied with the way in which the British Medical Association defended the rights of the medical profession, and put down quackery. It made several very abortive attempts to put down quackery in the medical profession, and he was sorry to say they heard nothing about it now. They must, as Mr. King at York said, by educating themselves, and by the position which they assumed, fight quackery. They must not expect to put it down by the force of the law. Still, as he hoped they might be able to, they were trying to modify some of its more blatant pretensions. The members of the Association might have the confidence that the best was being done in the interests of the Association. They were not very proud of what they had done, they did not usually brag of what they had done, there was too much to be done in the future for them to look back upon the past and say "Who did this?" and "Who did that?" They had a very great work before them, and it was only by looking forward and not cavilling over ancient history that they would achieve anything. He thanked them for listening to him so long, and for the interest they took in the Association. He thanked this Branch for the efforts it was making for the Association, and he thanked them for the confidence which they reposed in those who try to manage the Association to the best of their limited abilities. He did not say that they supposed they had all the ability of the profession. He did not say that there were not others better. He sincerely hoped that able men would come to the front, and he, for one, would be ready to give way to an able man who did come to the front. And when he said this he spoke also of every official of the Association. He thanked the representative of the medical profession of Northampton, who had come there that night.

Mr. KING also responded very briefly.

Dr. MILLIGAN proposed the "Odontological Society," and Dr. WALKER responded.

Dr. GEORGE CUNNINGHAM proposed "The Medical Profession." He said he thought that everyone around that table, whether medical or dental, would admit that dental surgery was indeed a speciality of medicine, and it was a unique speciality because it had a Register of its own, and had a special Act of Parliament regulating the education and position of members of that profession. And though the separation between the dental and medical profession had been a distinct advantage it had not been altogether

an unmixed good. He thought in the olden time there was a closer bond between the higher members of the profession than that which existed to-day. For instance, then a medical man knew more, and felt it was his duty to know more of dental surgery than at the present day. Of course, the modern medical practitioner might rightly say "Why should I bother myself with gaining acquaintance with dental surgery? I do not want to treat these cases, and I had much better send them to my dental friends." He did not think that they would ever arrive at a due appreciation of the respective duties which existed, nor derive the full advantages obtainable from a closer harmony of action between the medical and the dental practitioner, until it was fully recognised that no medical education could be complete while it totally ignored the elements and principles of dental surgery. And he thought that that medical school which had been so well and so closely identified with the dental profession—the Middlesex Hospital—showed the line which should be taken. He might say that at Cambridge there were members of the medical profession who had given most ardent support to this contention. As they knew, there was a course of lectures in dental surgery in the medical school of Cambridge University, but, of course, attendance at these was not obligatory. Many know that Professor Macalister had been a good friend, and had been mainly instrumental, not only in affording a hall and use of specimens from the museum for the course of such lectures, but he had also been good enough, when charged with the education of medical students, to bring forward the importance of the subject. And he knew that if only such men as Professor Macalister could have their way, such a course would not be voluntary, but obligatory, on medical students. He could congratulate the Association on having the usual number of medical gentlemen present. He could compliment them upon the quality of the medical representative present. The other members of the medical profession in the town had missed something by not being there to-night, and if the proceedings of their Society interested them, they could, one and all, help them in carrying out the good and useful work which this profession had at heart, and which was something so intimately associated with, that it could not be separated from, the best interests of the medical profession itself.

Dr. MILLIGAN, who acknowledged the toast, said, he was very much obliged to Dr. Cunningham and to them for the kind way in

which they had drunk the health of the medical profession, who, he was afraid, did not deserve all their kind words. He might just say in connection with the Army and Navy that the *British Medical Journal* had taken up the question of treatment of the teeth, and of the soldiers and sailors, and they said, most decidedly, their treatment was undoubtedly bad, and there ought to be dental surgeons in both departments. He had seen necrosis of the jaw brought on by a tooth being extracted by the hospital sergeant. Teeth were generally taken out by the hospital sergeant or the army doctor, and more often by the hospital sergeant, and this showed how soldiers' teeth were treated in the army.

Mr. J. SMITH TURNER proposed the health of the Chairman, who briefly responded.

Mr. KIRBY proposed the health of the visitors who had helped to entertain them—Mr. Ben Greet and various members of his Pastoral Players' Company.

Mr. BEN GREET and Mr. COOPER acknowledged the compliment.

Mr. SHERWOOD proposed the health of Mr. Rhodes, the hon. secretary of the Branch. He had known Mr. Rhodes a good many years, and it was through his influence that Mr. Sherwood was present. He had heard a very good account of the Association, and he would very much like to become a member himself. He only wished he had been a member a number of years of the Association. He thanked the members for the pleasant evening they had afforded him, and promised that wherever the next meeting should be held, if possible, he would attend.

Mr. BUTLER WILKINS supported the proposition of Mr. Sherwood, and expressed his regret that he had not before taken an active part in the work of the Association. Mr. Rhodes had been the means of his becoming a candidate for election, and although he was now old, it would be his earnest endeavour to exert all the interest he could in furtherance of its views and principles.

Mr. RHODES acknowledged, and the proceedings closed with the National Anthem.

Western Counties Branch.

THE Annual Meeting will be held at the Athenæum, Plymouth, on Friday, 27th July, 1888.

THE ORDER OF PROCEEDINGS WILL BE AS FOLLOWS :—

10 a.m.—Meeting of Council, at the Grand Hotel.

11 a.m.—General Meeting of Members, for the transaction of business ; President's Address ; Reading and Discussion of Papers.

1.45 p.m.—Adjournment for Luncheon.

3 p.m.—Business of Meeting resumed.

7.30 p.m.—Dinner at the Grand Hotel. Tickets 6s. 6d. Members intending to be present are requested to make early application to the hon. secretary.

An excursion is arranged for Saturday, July 28th, to proceed to Endsleigh, the seat of the Duke of Bedford, viewing the "Devon Great Consols Mine" on the road, taking a simple lunch on the grounds, and returning to high tea at Tavistock in the evening.

Subscriptions due August 1st should be paid to the honorary treasurer, J. T. Browne-Mason, 6, Southernhay, Exeter.

Gentlemen desirous of becoming members should apply to the Honorary Secretary of the Branch, Henry B. Mason, 3, Bedford Circus, Exeter.

Hotels in Plymouth are—"The Grand," "The Royal," "Harvey's," "Duke of Cornwall," &c.

PAPERS AND DEMONSTRATIONS HAVE BEEN PROMISED AS
FOLLOWS :

Papers.—"Some Surgical Conditions in connection with Dentistry," by Paul Swain, F.R.C.S.Eng. ; "The Physiological Action of Cocaine," by W. A. Hunt, M.R.C.S.Eng., L.R.C.P.Lond. ; "Popular Education in Dental Matters" by J. C. Oliver, L.D.S.Eng. ; "Notes of two cases of Epulis removed at the Exeter Dental Hospital," by J. M. Ackland, M.R.C.S.Eng., L.D.S. ; "Crown and Bridge Work," by J. H. Gartrell, L.D.S.I.

Demonstrations, &c.—"My method of Pivoting," by T. Cooke Parson, M.R.C.S.Eng. ; "Pivoting," by J. T. Browne-Mason, L.D.S.Eng. ; "The taking of Impressions of the Mouth," by J. C. Oliver, L.D.S.Eng. ; F. H. Balkwill, L.D.S.Eng., will shew a case of Restoration of Lower Lip and a regulation case ; E. L. Keys will shew a model and make casual communication.

The demonstrations will be given at the rooms of the President-elect (Mr. F. H. Balkwill), 3, Princess Square.

ORIGINAL COMMUNICATIONS.

The Registers for 1879 and 1888, as they affect Scotland.

By REES PRICE, L.D.S.Eng.

THE 21st July of this year will complete the first decade of the Dentists' Act; it will be ten years since the art and science of dental surgery acquired a legal position.

Again, owing largely to the persistent efforts of Dr. Waite, the Registrar of the General Medical Council in 1887 undertook to revise the Dentists' Register, and notices as prescribed by the Act were sent to every practitioner on the Register for 1887. We have, then, arrived at a position when it becomes interesting to enquire what has been the effect of the various efforts made by the Licensing Boards, the British Dental Association, and also Nature herself, as seen by a comparison of the Dental Registers for 1879 and 1888. The Representative Board of the British Dental Association some twelve months ago ordered a Geographical Register to be prepared for the United Kingdom. Copies were to have been put into the hands of the hon. secretaries of branches. But this has not been done, owing, it is stated, to the great expense entailed. As hon. secretary of the West of Scotland Branch I have felt the want of such a Register for reference, and I therefore prepared one for Scotland only. There were only some 314 names to be dealt with, so the task was not a very formidable one.

It may be noticed, in passing, that, by the revision ordered last year by the Registrar, the number of practitioners has been reduced from 5,207 in 1887 to 4,899 in 1888, a decrease of some 300 (showing how necessary such a revision was), and next year will show a still further reduction. The number of licentiates has increased from 932 to 977, or from 17.89 to 19.94, or 20% of the total number on the Register. This percentage of licentiates is by no means the real one. There are a dozen or so men in Scotland who have obtained the L.D.S., *sine curriculo*, and have not registered it, and we may assume this therefore of the United Kingdom.

Comparing the Registers of 1879 and 1888 it is found that the number of licentiates in Great Britain has increased from 483 (or 9.13 per cent. of the whole) to 977 (or 19.94 per cent. of the total), a not uninteresting feature. The Register of 1879 is

1888.	L.D.S.	In Practice with Pharmacy.	Dentists in Practice before July 22nd, 1878.	Members of B. D. A.	1888.	L.D.S.	In Practice with Pharmacy.	Dentists in Practice before July 22nd, 1878.		
Aberdeen -	19	5	3	11	2	Brought forward	250	59	56	135
Airdrie -	2	—	2	—	—	Inverurie -	1	—	1	—
Alva -	1	—	1	—	—	Kelso -	2	—	1	1
Alloa -	1	1	—	—	—	Kilmacollm -	1	—	1	—
Arbroath -	1	—	—	1	—	Kilmarnock -	2	1	—	1
Ardrossan -	1	—	1	—	—	Kirkcaldy -	3	—	1	2
Ayr -	4	1	—	3	1	Keith -	1	I D.D.S.	—	—
Banff -	2	—	2	—	—	Largs -	2	1	1	—
Ballieston -	1	—	1	—	—	Langholm -	1	—	1	—
Berwick -	2	1	—	1	1	Leven -	1	—	1	—
Bo'ness -	1	—	—	1	—	Leith -	3	—	2	1
Brechin -	2	—	—	2	—	Lerwick -	1	—	1	—
Buckie -	1	—	1	—	—	Lochee -	2	—	2	—
Cupar-Fife -	2	—	—	2	—	Lochgelly -	1	—	1	—
Castle-Douglas -	1	—	1	—	—	Markinch -	1	—	1	—
Dalkeith -	1	—	1	—	—	Montrose -	2	1	—	1
Dingwall -	1	—	—	1	—	Monifieth -	1	—	1	—
Dumbarton -	2	—	1	1	1	Musselburgh -	1	—	1	—
Dunfermline -	4	—	2	2	—	New Deer -	1	—	1	—
Dumfries -	3	3	—	—	1	Paisley -	8	—	—	8
Dunse -	1	—	1	—	—	Peebles -	1	—	—	1
Duntroon -	1	—	1	—	—	Perth -	6	1	—	5
Dundee -	13	4	2	7	5	Peterhead -	3	—	1	2
Dysart -	1	—	1	—	—	Port-Glasgow -	2	—	1	1
Edinburgh -	67	16	11	40	19	Portsoy -	1	—	1	—
Elgin -	4	1	1	2	—	Rothsay -	1	—	1	—
Fraserburgh -	1	—	1	—	—	St. Andrews -	1	—	—	1
Falkirk -	1	1	—	—	1	Sanquhar -	1	—	1	—
Glasgow -	92	24	*16	†52	25	Selkirk -	1	—	1	—
Greenock -	6	1	1	4	1	Stirling -	4	2	—	2
Grantown -	1	—	1	—	—	Stranraer -	2	—	—	2
Greenlaw -	1	—	1	—	—	Strathaven -	1	—	—	1
Galashiels -	2	—	—	2	—	Saltcoats -	1	—	1	—
Hamilton -	1	—	—	1	1	Tillicoultry -	1	—	1	—
Hawick -	1	—	—	1	—	Uddingston -	1	—	—	1
Inverness -	4	1	2	1	1	Wick -	2	—	2	—
Irvine -	1	—	1	—	—					
Carry forward	250	59	56	135	59	Total	314	66	83	165

* 5 practise dentistry only; 8 as chemists and dentists; 1 as manufacturing chemist; 2 no information.

† 8 have the L.D.S., but have not registered the diploma.

72 places scheduled in Scotland. In 33 of these dentistry is combined with the business of druggist solely, and by 37 chemists and druggists.

COMPARISON BETWEEN THE DENTAL REGISTERS OF 1879 AND 1888.

	1879		1888	
L.D.S.	26	7.58	65	20.70
In Practice with Pharmacy	126	36.73	83	26.43
In Practice before July, 1878	191	55.69	165	52.55
D.D.S.	—	—	1	.32
	343	100.00	314	100.08

notable in as much as it gives the details of the conditions under which the individuals registered—whether as licentiates of dental surgery or as in practice only, or in conjunction with medicine, surgery, or pharmacy. These details were omitted in later Registers. The description is as merely in practice before July 22nd, 1878, with any dental or medical qualifications added.

In the annexed table the names on the Register in Scotland have been classed under three heads, viz., licentiates, those in practice with pharmacy, those in practice before July, 1878. Those who are registered as in practice in conjunction with medicine or surgery are very few, and are merged with those in practice before July, 1878. Comparing, then, the first Dentists' Register and the most recent, we find that the total number practising dental surgery has fallen from 343 to 314, a decrease of 29. The number of licentiates has risen from 26 to 65 (or from 7.58 to 20.7 per cent.), a very large increase. Those who registered as in practice with pharmacy have fallen from 126 to 83, a decrease of 43; and those as merely in practice, from 191 to 165, a decrease of 26. But for the number of registrations effected under section 37, to which reference will be made immediately, the decrease would have been much larger. Of course many in the last class have gone to make up the increase in the number of licentiates.

In the above table the first column of figures gives the total number practising in each of the seventy-two different cities, towns, and hamlets which contain registered dentists. The next three columns divide numbers into three heads, and the last column gives the number of members of the British Dental Association in each place.

Taking the second column—those holding dental qualifications—the number is 65 or 66, including a D.D.S. of Michigan who practises in Keith; and ranges about 21 per cent. of the total number. You will notice in a foot-note that in Glasgow there are eight licentiates who have not registered their qualification. In Edinburgh there are one or two, and possibly over Scotland there may be a few more. This would increase the number of licentiates, and the total number may fairly be put at about 25 per cent. of those on the Register. Scotland has a slightly higher per centage of licentiates than the United Kingdom.

It is a great pity that men who hold the L.D.S. will not take the trouble to register it. The fee is merely a nominal one, and further, registration implies the name appearing in the Medical

Directory, where honorary appointments and other details are set forth. The directory is really the book that the public consult.

Nothing further calls for comment in this column, but to point out that Dumfries holds the unique position of having all its dental surgeons, licentiates—a position many towns will not obtain for a generation to come.

Of those who originally registered as being in practice in conjunction with pharmacy, eighty-three are still on the Register, or 26.43 per cent. Some have doubtless given up the pharmacy connection, for as regards the sixteen who in Glasgow come under this designation, five practise as dentists only, eight as chemists and dentists, one as a manufacturing chemist, and of two there is no information. Further, of the seventy-two places in Scotland which contain dentists, in thirty-three the art of dentistry is combined with the business of a chemist and druggist only, and by thirty-seven chemists and druggists. The following is a list of the places :—

Airdrie, 2.	Fraserburgh.	Markinch.
Alva.	Grantown.	Monifieth.
Ardrossan.	Greenlaw.	Musselburgh.
Banff, 2.	Irvine.	New Deer.
Ballieston.	Inverurie.	Portsoy.
Buckie.	Kilmacolm.	Rothsay.
Castle Douglas.	Langholm.	Sanquhar.
Dalkeith.	Leven.	Selkirk.
Dunse.	Lerwick.	Saltcoats.
Duntroon.	Lochee, 2.	Tillicoultry.
Dysart.	Lochgelly.	Wick, 2.

Most of these places are but small towns or hamlets, and it can be understood that only minor dental operations are practised, and would be performed whether the operator were registered or not. The elimination of these names is a matter of time.

Twelve individuals registered in 1879 as in practice in conjunction with pharmacy are still on the Dentists' Register for 1888. Their names do not appear on the Register of Chemists and Druggists for 1877, 1878, 1879, or 1888. Three of these practise as dentists only. It might be desirable to obtain information about the other nine persons. One of these is a lady, the only registered lady dentist in Scotland.

Five individuals registered as in practice with pharmacy in 1879 appear on the Register for 1888. Their names do not appear on the Chemists and Druggists' Register till from three to seven years after they obtained registration as dentists. This is rather a

different class of case from that just mentioned, and one that certainly ought to be inquired into. By direction of the Council of the West of Scotland Branch, these names have been sent to the Business Committee in London. The most flagrant case is that of a person who did not pass the minor examination of the Pharmaceutical Society till 1885, and who consequently was not on the Chemists and Druggists' Register till that date. Assuming that he was twenty-one when he passed the minor examination (and he could not pass till that age) he was fourteen years old when registered as a dentist in practice with pharmacy.

The column of dentists in practice before July 22nd, 1878, only calls for one comment. Under clause 37 of the Dentists Act, in its first section, provision was made for the registration (as dentists) of pupils (those who paid a premium), if their indentures expired within a given period after the passing of the Act. By the second section of clause 37, the General Medical Council has power to dispense with any certificates, examinations, and any other conditions it thinks fit, and to place on the Register any dental students or *apprentices*, who have commenced their education or apprenticeship *before* the passing of the Act. In other words, the Council, if it thinks fit, can put any man on the Register at any time, if he were doing dental work before the Act was passed.

Pupils are not generally taken in Scotland, most persons being indentured as apprentices, paying no premium. Since 1880, in Scotland, thirty-two persons have been put on the Dentists' Register under clause 37, and are registered as having been in practice before July 22nd, 1878. No doubt some of these thirty-two men were fully entitled to be registered, but the greater number have only obtained registration by grace of the Medical Council.

As an illustration, the West of Scotland Branch had under its consideration about two years ago the case of a person calling himself "surgeon dentist," and who was not on the Register. It was found that he had been apprenticed (not articulated) to a practitioner in Glasgow, from 1875 to 1882. The case did not come under the order made by the Medical Council regarding the first section of clause 37. The matter was sent to the Representative Board, and it was found that the man had tried to get on the Register, and had sent up the registration fee, but this had been returned by the Registrar, and registration refused. Ultimately the title of

surgeon dentist was removed from the door plate. Last December "surgeon dentist" had again been put up, and on enquiry it was found that the man had obtained registration a week before. There were no new circumstances in the case, and yet the Council finally registered him. The details of other cases are similar, and there is a recent instance of a man who has obtained registration, though his indentures of apprenticeship are dated after the passing of the Act. For many reasons it would be difficult to get the General Medical Council to re-open these cases, and to go behind the fact of registration, but registration under clause 37 ought to be stopped. There must be few, if any cases not already registered under the first section of the clause, and the power of the Council under the second section, ought only to be used after searching enquiry into all the details of the case.

A resolution might well go from this meeting, calling the attention of the Executive in London to this matter, and asking them to bring it before the General Medical Council.

HOSPITAL REPORTS AND CASES IN PRACTICE.

Pyæmia of Dental Origin.*

BY ARTHUR W. W. BAKER, M.D., F.R.C.S.

SURGEON TO THE DENTAL HOSPITAL OF IRELAND.

As pyæmia from dental causes is not very common, or perhaps has not been frequently recognised, the notes of a case which came under my own observation are, I think, deserving of record. Before, however, detailing my own case, I will refer to some of the scanty literature of the subject.

In the recent edition of Tomes' "Dental Surgery," the author refers to seven cases of acute and chronic pyæmia of dental origin which he has collected from various sources, all of which proved fatal. Two of these, however, in my opinion were, strictly speaking, not pyæmic, as we now understand the term. In one, extension of an abscess connected with a lower wisdom tooth produced some severe unilateral glossitis, and mechanically suffocated the patient. In the other, splintering of the lower jaw in the removal of a tooth gave rise to an abscess, which found its way up to the

* Read in the Pathological Section of the Royal Academy of Medicine in Ireland.

ramus, and through the foramina ovale rotundum and spinosum into the cavity of the cranium, when meningitis ensued, of which the patient died. The remaining five cases may fairly be classed as pyæmic, and as such deserve our attention, for they point to the fact that alveolar suppuration cannot always be treated as an affection of no moment, but may sometimes be attended with even fatal consequences. Unfortunately, details are wanting in the cases recorded by Mr. Tomes, upon which we might with advantage generalise.

Dr. R. F. Porre, at the International Medical Congress held at Washington in 1887, brought forward some cases of chronic pyæmia of dental origin, in all of which there was, fortunately, a happier termination than in those recorded by Mr. Tomes. Dr. Porre gives the following account of one of the cases observed by him :—The patient, male, good constitution and habits, suffered for the last thirty years from neuralgia, besides having constantly recurring furuncles and eruptions in various parts of the body, which would often for months become running abscesses. He experienced burning and itching eruptions of hands and feet, which would finally change to stubborn ulcerations. His bowels were either stubbornly constipated or exhaustively loose. He suffered from frequent rigors and febrile attacks of varying intensity, profuse night sweats, retention of urine, serious constrictions of the bowels and urethra. Laminating pains darted from the maxilla of right side to bowels, bladder, limbs, hands and feet, or to whatever part was locally affected at the time. This latter peculiarity, together with the discovery of a little pus exuding from the locality of the wisdom tooth, led to a final correct diagnosis of his case. The tooth referred to was extracted, and a speedy and complete recovery followed. Dr. Porre also read the notes of ten similar cases, which all yielded to the simple remedy of removing the offending tooth.

Mr. Frederick Eve, Curator of the Royal College of Surgeons, England, in a recent communication to the Odontological Society, whilst noticing the fact that in periodontal abscess, although the pus directly gained access to the bone, serious consequences rarely followed—yet related the case of a young man who had been troubled by an abscess in the region of the fangs of a second molar tooth. He attended the funeral of his grandfather, caught cold in the tooth, and died in three weeks of pyæmia.

Some interesting experiments on mice are at present being car-

ried out by Dr. W. D. Miller of Berlin, by inoculating them with the material obtained from gangrenous pulps. As these experiments are not yet concluded, it would be premature to do more than allude to them here ; but from Dr. Miller's recent communication to the *Dental Cosmos*, he is evidently quite alive to the importance of investigating this source of pyæmia.

The following case occurred in my own practice. I am happy to say that it was not fatal, and that I succeeded in curing the patient without sacrificing the offending tooth :—

CASE.—Mrs.—, aged thirty-three, widow, consulted me in the beginning of November, 1887, about her first left upper molar tooth, which had given her pain from time to time. The patient appeared to be in excellent health, and presented no evidence of constitutional taint. She stated that the only illness she had had, excepting, of course, her confinements, was a severe attack of scarlatina at twelve years of age, which was followed by general dropsy. At the age of nineteen, the first left upper molar (the tooth about which she consulted me) was filled ; this resulted in an alveolar abscess over the tooth. Ten years later she had another rather acute abscess in the same place, which was followed at once by a small abscess on the fourth toe of the right side ; then small abscesses broke out over other parts of the body at the same time, the tooth being the seat of more or less uneasiness. Early in the spring of 1887, she suffered from an abscess in the right ear, which by the medical attendant was thought to be connected with some tooth. About a week previous to consulting me she had a recurrence of the abscess over the left upper molar ; this was followed by a small pimple on the back of the right forearm, which at the time of her visit presented the appearances of a small pyæmic abscess. Viewing the case as one of chronic pyæmia, having its origin in the suppuration about the roots of the molar, I decided to try and save the tooth, and in so doing, if possible, to cure the pyæmia.

The tooth I treated by removing all that remained of the dead and decomposed pulp, cleaning out the roots thoroughly, syringing them first with weak carbolic lotion, then with absolute alcohol. The roots were finally dried with hot air and injected with a solution of iodoform in ether, and the filling up of the tooth completed at a subsequent sitting. There was a swelling, about the size of a small marble, on the gum over the buccal roots of the tooth, corresponding to the site of the alveolar abscess to

which I have alluded : this I laid open freely, and allowed it to heal from the bottom. The fluid which escaped from this swelling was more like cystic fluid, such as is frequently found as the result of chronic inflammation round the roots of teeth, than true pus.

It is now more than six months since I treated this case, and being interested as to the result, I have kept the patient under observation. She has had no further trouble with the tooth, and the metastatic abscesses have ceased. That the tooth was the source of the poison, to my mind, appears extremely probable, both from the frequency with which the periodontal abscess was succeeded by an abscess elsewhere, and the fact that the small abscess, which was situated on the patient's forearm when she came to me, subsided more rapidly than any previous abscess on treatment of the tooth ; and no abscess has since then appeared.

I am not quite clear as to the explanation of why the pyæmia evidenced itself always on the right side, while its dental origin was on the left. That more serious symptoms did not present themselves in this case was most likely due, as pointed out by Mr. Watson Cheyne in his recent lectures on "Suppuration and Septic Diseases," to the small dose of the poison.

The history of this case, taken in conjunction with the others which I have quoted, shows the importance of investigating the condition of the mouth in any case of pyæmia, where we are in doubt as to the source of the disease.

MINOR NOTICES AND CRITICAL ABSTRACTS.

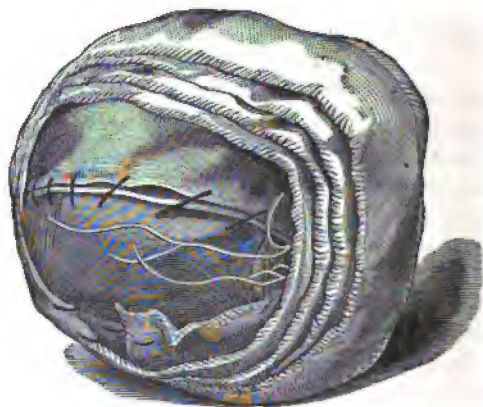
A Curious Case of Malingering.

BY A. PEARCE GOULD, M.S.

EARLY in April I was asked by a friend to see a servant girl who was stated to have a "dead tumour" in the cheek and a similar one growing on the other side. One surgeon had advised their removal ; another had regarded the case as hopeless. The patient was brought to me at the Temperance Hospital on April 12th ; she was twenty years of age, apparently in excellent health, and she showed great reluctance to be examined. The left cheek was distended over a firm rounded tumour, the size of a large Tangerine orange. (Fig. 1.) It was not fixed firmly to the jaw, and the cheek appeared to move over it. "It had been growing

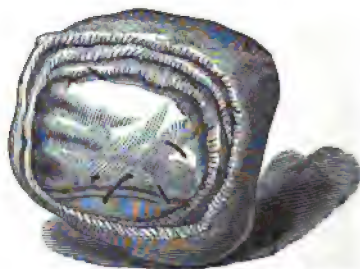
for three years." The right cheek was similarly affected, the swelling being the size of a large walnut. (Fig. 2.) On everting

FIG. 1.



the lip I saw a grey surface like a slough, but traversed with threads. The finger in the mouth then confirmed the suspicion that these "tumours" were foreign bodies between the cheeks and the jaws. With forceps I removed two balls, the larger of which, in the left cheek, was with some difficulty extracted through the mouth. The cheeks then hung down in flaccid folds. The

FIG. 2.



second lower molar on the left side was displaced inwards, and its buccal fang was exposed almost to the tip. The lining of the cheeks was pale in colour and thickened. The "balls" consist

of strips of calico very tightly sewn together with black thread. They are well represented in the accompanying diagrams. I have been unable to discover any motive for this curious freak, and in this it is on a par with many of the practices of hysterical girls.—*The Lancet*.

Dental Anomalies.

THE correlation that exists between the hair and the teeth has been remarked by many observers. Thus Darwin, in "Animals and Plants under Domestication," mention the deficiency of teeth in the hairless Egyptian dogs, and an analogous case of a Hindoo family in Scinde, in which ten men in the course of four generations were furnished in both jaws, taken together, with only four small and weak incisor teeth and with eight posterior molars. The men thus affected had very little hair on the body, and became bald early in life. Darwin also quotes the case of the Burmese hairy family, in which, unlike the preceding, there is an abnormal growth of hair on the skin and a deficiency of teeth. Mr. Crawford, in "Embassy to the Court of Ava," in 1826, describes Shwé Maong, the father, then thirty years of age, as being of the average height of the Burmese, covered with silky white hair upon all parts of the body, especially over the shoulders, where it was five inches long. He had only four incisors in the upper jaw, and in the lower four incisors and the left canines. He stated that he did not shed the temporary teeth till twenty years of age. King Theebaw presented him with a wife, and one at least of several children born, and that the sole surviving one, was born hairy. She (Maphoon) was stated by Mr. Crawford and by Captain Yule, who visited the coast of Ava later, to be almost edentulous. Recently Maphoon, now about seventy years of age, has been on exhibition at Washington, and having some trouble with the mouth, was seen by a dentist (Dr. Daly) of that city. He removed fifteen teeth, showing that the deficiency in number was not so great as was thought to be the case; but that teeth and hair are correlated to some extent was shown by two pairs of teeth being "geminated," two upper molars being joined together by their roots, and a lower second molar and wisdom tooth united by both crown and roots. One son of Maphoon is also on exhibition, but his mouth was not examined. The hairy Burmese family were on exhibition in London last year, but we do not know whether any examination was then made of the dental organs.—*The Lancet*.

ANNOTATIONS.

ALL papers intended for the Annual Meeting must reach Mr. Booth-Pearsall, 13, Upper Merrion Street, Dublin, not later than the 20th instant.

WE are glad to hear that specimens are now reaching Dublin in such numbers, and of such interest, as to put an end to any doubt as to the success of the Museum. The work of arranging and catalogueing is being got through satisfactorily. This work would be rendered more easy if some of the contributors would be a little more careful in the matter of descriptions, and in placing their names on models, and in sending letters of advice with their parcels. The 20th of July is about the latest date for receiving contributions, the work of classification, and the preparation and printing of the catalogue necessarily occupying a considerable time.

WE are pleased to learn that the Royal College of Surgeons, in Ireland, have contributed 50 guineas to the Reception Fund. This practical expression of good will is, it is needless to say, very gratifying, both to the committee in Dublin, and to the members of the Association generally.

THE Museum Committee are very anxious that it should be clearly understood that they cannot be in any way responsible for specimens brought over by members and laid on the table during the meeting. The inconvenience of such a mode of contributing specimens is so palpable, that we cannot think there is any fear of its being resorted to by any contributor.

WE are requested to acknowledge, on behalf of the Annual Museum Committee, the receipt of specimens from Dr. Martini Turin, A. S. Underwood, Morton Smale, J. H. Whatford, W. Kelly, Felix Weiss, T. King, A. Raynor, A. Howarth, A. H. Hunt, W. Hele, H. Evans, J. W. Senim, J. T. Browne-Mason, from Western Counties Branch; J. Dennant, W. H. Daish, J. E. Welch, F. Van der Pant, A. Gabell, J. Ellis, C. S. Gibbons, J. H. Redman, Charles Sims, J. Richards, J. Humphreys, H. Williams, H. P. Fernald, T. Harriss, S. Smyth, W. Hele, W. Williamson, S. Wormald, A. Kirby.

A PARCEL has been received containing six tubes with specimens, sealed with black wax, packed in blue Wolrab wooden cases. The sender of this parcel would greatly oblige by making the Committee acquainted with his identity. In this case the post-mark could not be deciphered, so that the only possible clue as to the sender was wanting.

MEMBERS intending to send pictures to the Art Exhibition are requested to bear in mind that such exhibits should reach Dublin not later than August 16th.

MEMBERS of the British Dental Association will be pleased to hear that the Dental Hospital of London, Leicester Square, has received notice that a legacy of £2,000 has been bequeathed to it by the late Mr. Capel Carter.

WE learn from *The Dental Review*, for June, that "at the twenty-fourth annual meeting of the Illinois Dental State Society, held at the Opera House, Cairo, Illinois, May 8-11, 1888, the following named persons were elected corresponding members of the society :—Geo. Cunningham, B.A., D.M.D., L.D.S., Cambridge ; John E. Grevers, D.D.S., Amsterdam ; J. G. Van Marter, D.D.S., Rome ; M. M. Levett, D.D.S., Paris ; E. Magitot, M.D., Paris ; A. H. Sylvester, D.D.S., Berlin ; Chas. S. Tomes, F.R.S., London ; J. Walker, M.D., L.D.S., London.

AMAUROSIS CAUSED BY A CARIOUS TOOTH. — The *British Medical Journal* quotes from the *Revista Medico-farmacéutica de Aragon*, a report by Dr. Riva, of the case of a woman, aged 30, who suffered from toothache, starting from the second upper molar of the left side ; the pain spread over the face, and after a week blindness of the left eye came on. Abscess of the antrum was suspected, and the tooth was extracted, a small quantity of pus escaping at the same time. In one of the fangs a tiny chip of wood was found, piercing the centre of the tooth perpendicularly. It appeared that the patient was in the habit of picking her teeth with small pieces of wood. A few days after the removal of the offending tooth she entirely recovered her sight.

It has been suggested to the Committee that many members would be glad to possess some of the racks which have been so in-

geniously devised for the exhibition of specimens. Acting on this suggestion, the Committee have determined to offer them for sale at the close of the meeting to any members who may desire to have them.

CORRESPONDENCE.

We do not hold ourselves responsible for the views expressed by our Correspondents.

The Annual Meeting.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—Since I wrote to you last month, ten members of the Association have announced to me their intention of attending the meeting. I gratefully thank these members for their kind forethought for my convenience, and I would earnestly beg all the other members who intend to come to do the same, so that we can proceed with our contracts and other details for the entertainments with some data to go upon. Dr. A. W. W. Baker and his colleagues are steadily working at the contents of the annual museum, which promises in some of the sections to be of great interest indeed, not only for the rarity of the specimens contributed by several members, but also the presence of specimens lent by the Odontological Society of Great Britain, Trinity College, Dublin, and also, I believe, the Odonto-chirurgical Society of Scotland. I must, therefore, ask your kind assistance in drawing our members' attention to the fact that after July 23rd, we must shut our doors to further contributions; and specimens of whatever interest or rarity, coming to hand after this date will of necessity be excluded from the collection and the catalogue. I would like to mention that the Literature Section has up to the present been enriched by the loan of two books only from London. I hope some member who has not so many irons in the fire of the British Dental Association as I have at present, will take the pains to make a collection of the *dental journals of the world*. There is time to do it and it ought to be done, if only to show how far scientific dentistry has advanced amongst the nations. We have some interesting books in Dublin relating to the dentistry of the past, but we would gladly add further contributions to this important section.

When the idea of having a *Work-room Section* in the Annual Museum was first mooted, it was hailed with considerable enthusiasm, but excepting a few things we have here, no tools, appliances, or inventions by members of the British Dental Association, have come to hand. We hope for the credit's sake of our profession that this all-important section will not be left severely alone.

Professor Daniel J. Cunningham, of the University of Dublin, has most kindly selected and catalogued for use in our Annual Museum,

interesting specimens of comparative anatomy from the rich collection of the University ; and we cannot thank him enough for the earnest and thorough way he has entered into the scheme of the Annual Museum, by placing his great scientific experience so freely at our disposal.

I have now to acknowledge the receipt of several suggestions how most effectively to "raise the wind," for the benefit of the Dental Benevolent Fund. To these admirable suggestions I have only one answer to make—let the members of the British Dental Association come provided with the sinews of war, and we will provide suitable outlets for their benevolent instincts for the benefit of this deserving fund. At present we must reserve to ourselves the *modus operandi* we shall adopt till the meeting, where we shall make our members fully acquainted with our pleasant surprise. We must therefore ask the members of the British Dental Association to leave us in the enjoyment of whatever originality or mother wit we can call to the aid of our *powers of mendicancy*, which are not to be despised, as a rule, in the Green Isle, and to rest assured our plans will be found remarkably effective when put into operation. I am happy to inform you that the kind assistance of my fellow members of the Dublin Art Club, will be shewn in a little art collection of more than average Dublin excellence, and three of the artist members—Messrs. Catterson Smith, R.H.A. ; Walter Osborne, R.H.A. ; and M. J. Kavanagh, have generously consented to organise and catalogue the collection. We will gladly welcome good modern art on our walls, whether it be the work of "tooth carpenters," or of professional artists. As the Dublin Art Club is formed of the younger and most talented of the Dublin artists, we hope the collection will be of interest to our members. Framed modern pictures or sketches intended for this Exhibition should reach Dublin not later than August 16th, and should be directed to me, c/o Dublin Art Club, 35, Molesworth Street, Dublin. We purpose using this room for some social reunions, I am not at liberty to mention just yet, but which we hope will afford much pleasure to our English and Scotch friends.

As my next and last letter to you on the subject of the annual meeting must be devoted to some of the details of the meeting, I must conclude my last appeal on behalf of the Museum Committee to those members of the British Dental Association, who have not assisted in the formation of the Annual Museum. We hope it will be the best feature of the meeting for we have spared no pains in our efforts to form a collection of remarkable interest to our profession, and from which rich stores of knowledge should be drawn by all who can appreciate order and organization.

I am, dear Sir, yours faithfully

W. BOOTH PEARSALL, F.R.C.S.I.

13, Upper Merrion Street, Dublin.

The Annual Museum. Sub-section IV.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—Some time ago, I made in the pages of your Journal, an announcement of the setting apart of a sub-section of the Annual Museum for the exhibition of tools and appliances for surgery or work-room, invented and made by members of the Association. Here was an opportunity which we fondly hoped would have been eagerly grasped at by the ingenious ones, of displaying many a clever device for the saving and ordering of labour, and many an aid to the attainment of happy results in our work, hitherto unknown to the profession at large.

I must confess that the result of my announcement has been disappointing. Whilst my friend Dr. Baker basks in the sunny smile of liberal contributors, I—less favoured—pine neglected in the cold shade of Sub-section IV.

That no dentist ever invented or made an ingenious tool or appliance is an untenable hypothesis; driven from which, I can only account for this negligence on the ground of that extreme modesty always characteristic of genius. Let me, therefore, beg of our friends to lay aside their modesty, and before it is too late, come forward with their exhibits, and give all a chance of seeing and studying what they have found so useful and helpful. Let members reflect that the man who devises a cunning impression to-day is worthy of greater credit than he who exhibits an odontome. The time is short, and as all exhibits must be classified and catalogued betimes, my Committee will be glad if those who intend to favour Sub-section IV. will at once forward their loans to Mr. Pearsall.

Faithfully yours,

GEORGE M. P. MURRAY, L.R.C.S.I.,

Hon. Sec. Sub-section IV., Annual Museum.

Dublin, July 11th, 1888.

The Royal College of Surgeons, The Medical Council and the Dental Hospital of London.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—Mr. Blandy very unwisely gave utterance to a report in his speech at York (as reported in your June issue) without first taking the trouble to verify at all, such an extraordinary statement as the one referred to, and notwithstanding Dr. Walker's mild protest Mr. Bullin supported Mr. Blandy in the same unauthenticated statement. Will you please allow me to say that *there is not a vestige of truth in the report*, and at the same time to point out to members of the Association that reports of this character, unverified and much to the discredit of the Dental Hospital of London, are better not made in public.

It is impossible for any denial published later to entirely counteract the mischief done by false statements, and I venture to think that gentlemen whose names appear on the roll of past students of the Hospital, are the last who should be ready to believe, much less to state in public, such unfounded, untrue, and unfair reports.

It is hard to realize the frame of mind which can induce any member of the British Dental Association to propogate such a report, and I much regret that Mr. Blandy, whose respect for truth is so well known,

should on the strength of information obtained "since he had entered the room," have been made the medium of circulating a statement which casts a grave aspersion at once on the Medical Council, the Council of the Royal College of Surgeons, and the whole Staff and Managing Committee of the Dental Hospital of London.

With a view of giving qualified medical men an opportunity of gaining some operative dental knowledge, which may be useful to them in their general practice, a course of six months' practical instruction has been arranged, for a fee of 10 guineas; for a less time than this no medical man can receive instruction at the Dental Hospital of London, and when he leaves the Hospital he has nothing but the formal receipt for his fee to show he has had such instruction, and he has gained no more right to take the L.D.S. than he had when he finished his medical studies.

The Executive of the Dental Hospital of London are collectively as tenacious for the integrity of the L.D.S. as any individual holder of that diploma can be, and the facilities offered to medical practitioners to become in a measure familiar with a part of the dental curriculum were considered as likely to enhance their estimate of dental education, as at present conducted in this country, and in this arrangement neither the Medical Council, nor the Council of the Royal College of Surgeons had any voice whatever.

Your obedient servant,

MOKTON SMALE,
Dean, Dental Hospital of London.

Recent Papers at the Odontological Society.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—As an old member of the Odontological Society, and one knowing something of the work of this and other societies, may I be allowed to say a few words in reply to the critics? One cannot deny that some of the papers which have been read from year to year at our Society's meetings have been below the desired standard of literary and scientific merit. I have heard a similar complaint made at our meetings over and over again, and year by year, and the complaint is not endemic, for I have heard similar complaints made at other societies, having a far older and more world-wide reputation than our own. And it may be borne in mind that few men in other scientific pursuits have the same justifiable excuse for this deficiency that we as a body have. We are engaged in one of the most laborious, body and mind-fatiguing occupations. The majority of our best men are daily engaged from ten until six o'clock, sometimes for a longer period, standing in a trying attitude the whole day long, with their faces in juxtaposition to the faces of their patients, inhaling the pre-breathed air exhaled by them, so that when the labours of the day are over, they are only too glad to shake off the dust of their dental world, and retire to the peaceful seclusion of their suburban homes.

I would venture to predict that if one were to casually ask a dozen men to work up original papers for our Society, eight of them would reply that they had no time for original research, and that when their day's work was done, they were only too glad to leave dentistry behind them; two would reply that they could think of nothing new at the moment, but would promise to give a paper one of these days; the other two might perhaps reply more definitely.

It requires a considerable amount of enthusiasm or self-denial to stimulate a man to labour systematically in the field of original research, after such a day's work as ours may be taken to be; and it is rather a matter of surprise to me that we obtain the number of papers, whatever their merit may be, with which our Society is favoured. It cannot be expected that they will all attain the same standard of excellence in a society of men gathered from a profession like ours, which is, though old in years, comparatively speaking, young in the higher branches of professional training and education.

Again, it must be borne in mind that the source from which we draw our subjects for literary treatment are naturally limited, and those we have to fall back upon have, for the most part, been so thoroughly threshed out over and over again, that it is a difficult matter to embrace in our efforts that originality of conception which one might desire.

If the critics themselves would kindly retire to their research laboratories and endeavour to remedy that which they criticise by giving us the fruits of their labours, the Society would, I think, know how to appreciate their services.

I am, Sir, faithfully yours,

"PAX VOBISCUM."

June 16th, 1888.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—I quite agree with the correspondent in the last issue of your Journal, who calls attention to the discreditable nature of certain papers recently read before the Odontological Society. The members have a right to expect an explanation from the Council of the Odontological Society on the subject. This matter should not be forgotten at the Annual Meeting in January next, when the Council will come forward for re-election, and can be questioned on matters relating to the management of the Society.

Such a duty might well be undertaken by a senior member, but lacking others, I will myself put a question on the agenda list for January next.

I am, dear Sir, yours obediently,

"L.D.S."

July 2nd, 1888.

APPOINTMENT.

EDWARD J. HORDERN, L.D.S., Glas., has been appointed Dental Surgeon to the "Couvent du Sacré-Cœur," à Layrac. Par Agen. (Lot-et-Garonne) France.

NOTE.—ANONYMOUS letters directed to the Secretary of the Association cannot receive attention.

P.O. Orders must be accompanied by Letters of Advice.

Communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

Subscriptions to the Treasurer, 40, Leicester Square.

All Contributions intended for publication in the Journal must be written on one side of the paper only. The latest date for receiving contributions for the current number is the 5th of the month.

SPECIAL NOTICE.—All communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

THE JOURNAL
OF THE
BRITISH DENTAL ASSOCIATION
A
MONTHLY REVIEW OF DENTAL SURGERY.

No. 8.

AUGUST 15, 1888.

VOL. IX.

The Annual Meeting.

By the time that this number of the Journal reaches the members of the Association, the preparations for the Annual Meeting will be to all intents and purposes complete; and the committees in Dublin will be passing through that period of doubt and expectancy, which is near akin to the *mauvais quart d'heure* which the hostess, who has put the final touches to her preparations for her guests, experiences just prior to their arrival. Who will come, and in what temper, and who, at the last moment, will send the inevitable regrets? In some shape or other such speculations are sure to be present wherever there is a gathering of any large number of persons. The measure of uncertainty will vary of course with the nature of the gathering, but it may be taken for granted that it will be present in only a minor degree in the one in which we are just now so immediately interested.

THE JOURNAL OF THE

If to deserve success were of necessity to secure it, there would be no room for doubt. Conceived in a liberal spirit and patiently carried on during many months, the preparations which our friends in Dublin have made, form the highest compliment which could possibly be paid by one branch of the Association to the other branches. The letters and annotations in the last few numbers of the Journal ought to have conveyed to the minds of our readers a fairly clear impression of the nature of the different arrangements. Newspapers and periodicals are, however, so often glanced at rather than read, that we are disposed to think that it may not be quite useless to take note once again of plans, some of which have already been the occasion of comment in our columns.

Of those features which are common to all our meetings, it is not necessary to say much. Papers of merit and interest there will of course be, as there always have been, and our Irish friends would be the last to desire that any superiority should be claimed for those to be read in Dublin over others read in previous years elsewhere. In the matter of the annual museum, however, the Irish Branch may with perfect modesty claim some exceptional merit, both as to design and execution. In one section indeed an admirable idea seems likely to fall a little short of the intention of the originators. We refer to the section devoted to the exhibition of mechanical contrivances and tools made by members primarily to meet their own needs. It will, however, probably be found even here that the failure is only relative, and that the contributions to this portion of the museum, though not so numerous as the secretary to the section anticipated, are both interesting and valuable. In any case the museum as a whole will prove a very special feature of this year's meeting. When we pass from the business arrangements to those preparations into which

the social element enters, we find the Irish Branch preparing to act the host as only those can who are to the manner born. The provisions which make for the comfort, ease, and entertainment of their guests, show a happy inventiveness. And just as in the matter of the Benevolent Fund, our friends scorn the cold economy of the plates sacred to parochial England, but promise livelier methods whereby to extract "the nimble sixpence and the lordly quid," so in the matter of amusement they will doubtless provide novelties surpassing the dull orthodoxy of Saxon methods. As regards the ladies, it were high treason to doubt for a moment the graciousness of an Irishman's welcome. Wives and sisters may, therefore, be taken across the Irish channel in the full assurance that if after a dozen delightful excursions to lake and valley, they do not declare that "the last rays of feeling and life must depart" ere the beauties of Ireland's pleasant places fade from their memory, they will at least carry away delightful reflections and happy impressions of Irish character.

It only remains for the members of the Association on this side of the channel to crown the work so well carried forward by accepting the invitation so cordially given. If they fail to answer the summons to be present, they will do more than disappoint their Irish brethren; they will damp the ardour of those on whom the labour of future meetings must fall. The lack of support at Dublin will inevitably be reflected in lack of preparation at Brighton twelve months hence. The Irish Executive have already received promises to be present from many valued friends, but these are naturally in great measure from those whose attendance might be relied on. It is on that part of our electorate (if we may apply such a term to our members) which would be classified by a political agent as "the doubtfuls" that a full representation of the Association depends. And a full

representation is necessary; quality does not, in public gatherings, make up for lack of quantity. The warmth of numbers and the sweet discord of many voices is essential. We trust, therefore, our members will make a point of being present. Those favoured mortals who can take the journey to the Emerald Isle without encroaching on their autumnal holiday, will have no excuse for absence; indeed, in their case the sense of duty will lend a gracious sanction to the little extravagance of an extra "outing." Such favourites of fortune are however not numerous in our profession, and we hope that the larger number who may have to make this meeting form part of the accustomed annual holiday, and on whose erratic wanderings it may therefore impose some geographic limits, will welcome the restraint. It is said that the last new feature in American weddings is one which places on the "best man" the duty of selecting where the honeymoon shall be spent, thereby saving the couple much perplexity and some possibility of disagreement. Let our friends regard the Dublin meeting as a like happy circumstance, giving direction to their travel and saving them from the temptations of the railway and tourist agents, and the perplexing suggestions of their friends.

The Dublin Executive, though not quite in the strait of the poor girl in an assembly room,

"Who waits in conscious diffidence to know
If fops will deign to ask her hand or no,"

are yet necessarily in a condition of some expectancy into which the shadow of a doubt may force entrance. Let our members make such "a demonstration in force" as will effectually banish their fears, and reward their energy and zeal. In one sense the Irish Committees may rest content: their work is done, and any failure—if such be possible, which we do not for a moment believe—falls not on them but on the Association of which they form a part.

ASSOCIATION INTELLIGENCE.

The Annual General Meeting.

THE Annual General Meeting of the Association will be held in the School of Physic, Trinity College, Dublin ; The Royal College of Surgeons in Ireland, and the Royal University of Ireland, on Thursday, Friday, and Saturday, August 23rd, 24th, and 25th, 1888.

Thursday, August 23rd.

9 a.m.—Meeting of the Representative Board in the Board Room of Royal College of Surgeons in Ireland.

9 a.m.—“Association and General Enquiry Office,” Temporary Post Office and the Annual Museum open at the School of Physic, Trinity College.

10.30 a.m.—The Annual Meeting for business (open to members only) will assemble in the Anatomy Theatre, School of Physic, Trinity College. *At the termination of the Association business the Meeting will be open to visitors.* J. R. BROWNLIE, L.D.S.Eng., will deliver his valedictory address.

DANIEL CORBETT, M.R.C.S., L.D.S.Eng., will take the Chair and deliver an Address.

LIST OF PAPERS PROMISED.

“Anæsthetics in Dental Surgery,” by ANTHONY H. CORLEY, M.D., F.R.C.S.I.

“Dental Ethics,” by R. THEODORE STACK, M.D.Dub., F.R.C.S.I., D.M.D., L.D.S.Eng.

“The Annual Museum and its Contents,” by A. W. W. BAKER, M.D.Dub., F.R.C.S.I., L.D.S.I.

“The Use of Imagination in the Design and Construction of Artificial Teeth,” by W. BOOTH PEARSALL, F.R.C.S.I., M.R.I.A.

“On the Workroom Section and its Contents,” by G. M. P. MURRAY, L.R.C.S.I.

“On some Properties of Amalgams,” by AMOS KIRBY, L.D.S.Eng.

“On some Work-room Appliances,” by A. J. WATTS, L.D.S.I.

“Notes on Implantations,” by GEORGE CUNNINGHAM, L.D.S.Eng., B.A.Cantab., D.M.D.

1.30 p.m.—Adjournment for Luncheon in Dining Hall, Trinity College.

2.30 p.m.—Reading and Discussion of Papers in Anatomy Theatre, School of Physic.

5 p.m. — Adjournment. The President, DANIEL CORBETT, M.R.C.S., will entertain the Members of the Association, and their friends who have received invitations, at a Garden Party in the Fellows' Garden, Trinity College. Music. Afternoon Tea.

7 p.m.—The Annual Dinner of the Association will take place at the Royal University of Ireland. The Band of the Royal Irish Constabulary will perform a select programme of Music.

Friday, August 24th.

9 a.m.—Demonstrations and Clinics in the Surgery Museum, School of Physic, Trinity College.

DEMONSTRATIONS.

Gold filling. Electric mallet accumulator. J. J. ANDREWS.

Open gold filling, with smooth ended pluggers. FRANCIS H. BALKWILL.

Use of separators in filling teeth. STORER BENNETT.

Cleft palate, from taking impression to the insertion of gold plate with artificial velum acting physiologically. JOHN A. BIGGS.

The use of the matrix. GEORGE BRUNTON.

Plaster impressions. WALTER CAMPBELL.

Gold filling. JOHN C. CLARKE.

Implantation. GEORGE CUNNINGHAM.

Wirth's new vulcaniser. BROTHERS CUNNINGHAM.

Gold crowns, gold fillings. W. ST. GEORGE ELLIOTT.

Gold Fillings, approximal cavities. H. P. FERNALD.

Removable bridgework. J. H. GARTRELL.

Mechanical appliance for treatment of cleft palate. GEO. F. GRANT.

The use of the rubber dam and other means of excluding saliva. S. J. HUTCHINSON.

Gold filling approximal in incisor with aid of a new pneumatic mallet. A. JONES.

Gold fillings with hot gold points in very frail teeth. R. F. H. KING.

Plaster impressions. W. BOWMAN MACLEOD.

Contour approximal fillings. T. COOKE PARSON.

Gold filling, hand pressure, cohesive cylinders. W. A. RHODES.

Gold crowns after Dr. Knapp's method and exhibition Knapp's blowpipe. CLAUDE ROGERS.

Gold filling under water. FREDERICK RYDING.

Kingsley's method of making artificial velum. JAS. SMITH-TURNER.

Continuous gum work. A. B. VERRIER.

a Plaster impressions. *b* Character of swivel for mounting spiral springs. JOSEPH WALKER.

Cohesive gold filling, electric mallet with foot accumulator. E. LLOYD WILLIAMS.

Gold filling, tin at base, hand pressure. R. H. WOODHOUSE.

Gold filling, electric mallet. W. H. WOODRUFF.

ROBERT HAZELTON, *Chairman* } *Demonstration Section.*
R. THEODORE STACK, *Secretary*

9 a.m.—“Association and General Enquiry Office,” Temporary Post Office and the Annual Museum open in the School of Physic, Trinity College.

12.30 p.m.—The Annual Meeting of the Dental Benevolent Fund in the Anatomy Theatre, School of Physic.

1.30 p.m.—Adjournment for Luncheon in Dining Hall, Trinity College.

2.30 p.m.—Reading and Discussion of Papers will be continued in Anatomy Theatre, School of Physic, Trinity College.

5 p.m.—Adjournment. Afternoon Tea, given by Irish Reception Committee, in Art Exhibition, 35, Molesworth Street, to Members who have received invitations to see Pictures, by Members of Dublin Art Club and British Dental Association.

8.30 p.m.—The Irish Reception Committee will entertain the Members, who have received invitations, at a *Conversazione* in the Royal College of Surgeons in Ireland. Music.

Saturday, August 25th.

9.45 a.m.—The Representatives of Messrs. Arthur Guinness, Son & Co. (Ltd.) will conduct a party of Members and Visitors who have received invitations, limited to 150 in number, over the largest brewery in the world. Entrance by St. James' Gate, end of Thomas Street.

12.40 p.m.—The Irish Reception Committee will entertain the Members, who have received invitations, to an Excursion to the Hill of Howth. A Special Train will leave Amiens Street Terminus, at 12.40 p.m., for Howth, and Luncheon will be served on arrival of the Excursion Party. Mr. J. R. Wigham has kindly consented to give a short description of “Gas Illumination in Lighthouses” at the Baily Lighthouse, after Luncheon. After the visit to the Lighthouse the party will be conducted round “The New Path,” or sent in Carriages to the Railway Station by the south side of the Hill.

SPECIAL NOTICES.

“The Association and General Enquiry Office” will open at 9 a.m. daily in Trinity College, under the superintendence of W. B. Pearsall

and Mr. Wm. Shea, from whom all tickets for members, visitors, lunches, and excursions may be obtained. The Association book will be found in this office, and members are reminded that it must be signed before entering the Museum.

By the courtesy of the Secretary of the General Post Office, Dublin, a temporary Post Office for the posting and delivery on application of letters, the sale of postage stamps, the acceptance and delivery of telegrams, and the registration of letters, will be open in the Annual Museum from 9 a.m. to 5 p.m. on Thursday, Friday and Saturday, August 23rd, 24th and 25th. Letters and Telegrams addressed to British Dental Association will be delivered here.

Ladies' Carriage Excursions will start from the School of Physic under the care of the Rev. Canon Bagot. Tickets, price 2/6 each, can be had at the General Enquiry Office, next entrance to Annual Museum.

Dinner Tickets, including Wine, 21/-.

Luncheon tickets, price 2/- each (which will include cost of wine, beer, mineral waters, &c.) will be issued daily at same place, or at entrance of Dining Hall, Trinity College.

The Ladies' Excursions are planned to terminate in time to join the members at luncheon.

Balcony tickets for the use of ladies wishing to be present at the Annual Dinner will be issued at this office.

Members requiring visitors' tickets must apply to Mr. Booth Pearsall, stating the name and address of intending visitor, and if he belong to the profession, or otherwise. Visitors' tickets are not transferable.

W. BOOTH PEARSALL, F.R.C.S.I., *Hon. Sec. Irish Branch*,
13, Upper Merrion Street, Dublin.

LIST OF HOTELS AND LODGINGS AT WHICH VISITORS CAN BE ACCOMMODATED.

HOTELS.—“Gresham Hotel,” Sackville Street, 6s., or full board, 10s.; “Morrison's Hotel,” Dawson Street, bed, breakfast, and attendance, 6s.; “Hibernian Hotel,” Dawson Street, bed, breakfast, and attendance, 6s.; “Maple's Hotel,” Kildare Street, bed, breakfast, and attendance, 6s.; “Buswell's Hotel,” Molesworth Street, bed, breakfast, and attendance, 6s.; “Tarpey's Hotel,” Nassau Street, bed, breakfast, and attendance, 6s.; “The Hammam Hotel,” Sackville Street, bed, breakfast, and attendance, 5s. 6d.; “Martin's Hotel,” Baggot Street, Lower, bed, breakfast, and attendance, 5s. 6d.; “Jury's Hotel,” College Green, bed, breakfast, and attendance, 6s.; “Grosvenor Hotel,” Westland Row, bed, breakfast, and attendance, 6s.; “Campbell's Hotel,” Molesworth Street, bed, breakfast, and attendance, 5s. 6d.; “Mackin's Hotel,” Dawson Street, bed, breakfast, 6s. (bachelor's hotel), “Central Hotel,” City Markets.

TEMPERANCE HOTELS.—“Russell's,” St. Stephen's Green, bed, breakfast,

and attendance, 5s. 6d. ; "Edinburgh," Sackville Street, bed, breakfast, and attendance, 5s. 6d. ; "Aitken's," Westmoreland Street, bed, breakfast, and attendance, 5s.

The above hotels are well within a mile of Trinity College, and many of them within a quarter-mile.

HOTEL OUTSIDE TOWN, but within easy reach by train, three times in each hour.

KINGSTOWN, "Royal Marine Hotel," bed, breakfast, and attendance, 7s. 6d. and 9s.

The following houses will take members at 5s. 6d. for bed and breakfast :

LOWER LEESON STREET.—Nos. 1 & 2, Mrs. Bolton ; 78, Mrs. Murphy ; 96, Mrs. Poole ; 97, Mrs. Elwood.

LOWER BAGGOT STREET.—Nos. 54, Mrs. Ferral ; 95, Mrs. Hayde ; 96 & 97, Mrs. Brewster ; 103 & 104, Mrs. Williams ; 113, Mrs. Gamble ; 115, Mrs. Stone ; 116, Miss Campling ; 117, Mrs. Gardiner, bed, breakfast and attendance, 7s. ; 122, Mrs. Guy, bed, breakfast, and attendance, 6s.

UPPER BAGGOT STREET, No. 31, Mrs. Baston.

Sitting rooms can be had in many of the above houses.

LOWER MOUNT STREET.—Nos. 19 & 20, Mrs. Borthistle, bed, breakfast, and attendance, 4s. 6d. ; 21, 22 & 23, Mrs. Brock, bed, breakfast, and attendance, 4s. 6d. ; 57, Mrs. Moore, bed, breakfast, and attendance, 5s. ; 70, Mrs. Morris, bed, breakfast, and attendance, 5s. ; 71, Miss Hale, bed, breakfast, and attendance, 5s. ; 73, Mrs. Madden, bed, breakfast, and attendance, 4s. 6d.

SOUTH FREDERICK STREET.—No. 15, Mrs. Longton, bed, breakfast, and attendance, 5s. 6d. ; 29, Mrs. Wilson, bed, breakfast, and attendance, 5s. 6d.

Sitting rooms can be had in many of the above houses.

HOLLES STREET.—No. 3, Mrs. Ryan, bed and breakfast, 4s. 6d. ; 35, Mrs. Gilbert, bed and breakfast, 4s. 6d. each ; 36, Mrs. Keogh, sitting and two bedrooms, £2 2s., bed and breakfast, 4s. 6d.

CLARE STREET, No. 14, Mrs. Tuke, sitting room and 2 bedrooms, £2 5s. per week ; bed and breakfast, 5s. 6d. per day.

NASSAU STREET, No. 17, Mrs. Sidford, sitting room and 2 bedrooms, £2 5s. per week ; bed and breakfast, 5s. per day.

UPPER LEESON STREET, No. 16, Mrs. Darling, bed and breakfast, 5s. per day.

NORTH FREDERICK STREET. — No. 13, Mrs. Keogh, bed and breakfast, 5s. 6d. ; 15, Miss O'Reilly, bed and breakfast, 5s. ; 18, Mrs. Kennedy, 5s. ; 34, Mrs. Winter, 5s.

GARDINER'S PLACE, Nos. 10 & 11, Mrs. Montgomery, boarding house, bed and breakfast, 5s. per day, full board, 8s.

GARDINER'S STREET, UPPER.—No. 5, Miss Philan, sitting and bedroom, £1 10s. per week, extra bedroom, 10s. per week ; 8, Mrs. Conarchy, sitting and bedroom, £1 5s. per week, extra bedrooms, 8s. and 9s. per week.

Southern Counties Branch.

(Continued from page 438.)

A PAPER was read by Mr. VAN DER PANT, on "Dental Obligations."

This was followed by a paper by Dr. REDMAN, on "The Use of the Matrix in Filling Teeth."

Mr. CUNNINGHAM advocated cheap matrices of German silver, or some such material, which could be made by the operator to suit special requirements. The matrix described by Herbert had been known to the profession for many years, and he had employed matrices of German silver long before the Herbert theory was brought out.

The HON. SECRETARY advocated matrices as relieving the operator of much unnecessary trouble.

Dr. REDMAN, in reply, pointed out that great care should be taken not to have any overhanging material in the matrix.

Mr. A. KING then read a paper on "Cocaine."

Mr. BAUDRY said that at the outset he had objected to cocaine, but Mr. King had induced him to take a more favourable view of the drug. He thought the practical arguments in favour of it were very strong, and if a person could bear the extraction of two teeth with so little pain as not to know that the operation had been performed, they might conclude in its favour. He contended that it was not more dangerous than chloroform or gas, while by means of cocaine the danger of fractured teeth passing down the trachea was obviated. He did not think that Mr. King, or anybody else, would administer cocaine to anyone who had heart disease; he had had fifty or sixty cases, and could not recollect one that had caused him any alarm. Only yesterday he had a very successful case, when he used two grains upon a child sixteen years of age, who did not wince at all.

Mr. CUNNINGHAM expressed a hope that some of the medical men present would express their views, because he thought the remarks of the last speaker should not be allowed to pass without observation. It was a recognised fact that they were dealing with a dangerous drug, and the sooner that fact was universally appreciated the better. He had previously heard of such experiences as had been given by Mr. Baudry, and at a previous meeting of the Branch they had a discussion on the subject. He had devoted some time to an investigation of cocaine and its effects

on men and animals, and the result of his investigations were now public, and part of their Transactions, and he hoped Mr. Baudry would refer to them. Before they went beyond the half-grain dose they must recognise the fact that they were dealing with a dangerous drug. A fellow-practitioner who had heard him express himself in the same way condemned his paper, but with what result? Two days afterwards this gentleman met him and withdrew his previous opinion, having had a very alarming experience in the use of the drug. His experiments convinced him of the dangerous properties of the drug. One or two investigators—he was sorry to say one or two of the best of them—had died victims to the drug. In a double sense, therefore, it was a very dangerous drug indeed. He preferred nitrous oxide, as a less risky agent.

Dr. GUILLEMARD, who said he had been using cocaine for three years, said he was one of the first of medical men to try it in Southsea, and he had used it with constant success in minor surgical operations, and with success on one or two occasions in minor dental operations. He had also had experience in the consulting rooms of various dental surgeons in Southsea, and the conclusions he had come to were that the drug was a most useful one. The intoxicating effects he did not think had been thoroughly worked out yet. They knew what atropin would do, and how far they could go with it, but they did not know the idiosyncracies of cocaine. It was a new drug, and, as in the case of all new drugs, everybody was using it, and laudatory and complimentary articles were written upon it; but if they waited a little they would get the true merits known. In one case he had operated on a cataract with great comfort and success, and the patient said, "I did not know that you were meddling with my eye at all," yet the eye was one of the most sensitive portions of the body. In tumours under the skin it was also very useful, and a few nights ago he had a case of quinsy, where the patient had not swallowed a spoonful of liquid for the day; but here he administered cocaine, and five minutes after the operation the patient swallowed a tumblerful of hot milk. On one occasion a patient came to him about eleven o'clock at night with a raging toothache, and asked him if he could relieve it until he could get to the dentist; a little cocaine in the cavity effected this at once, and the patient slept all night. He used it on members of his own family, and on the servants, and had never had an uncomfortable case; and he kept in the box in

his emergency bag half-grain powders of cocaine. He dissolved a half-grain powder in ten drops of water, and generally used as much as that, or as much of it as would suffice for the operation. He had never seen any uncomfortable effects from it, and where the parts were most sensitive he had met with the greatest success. In ophthalmic surgery they met with most sensitive surfaces, and here cocaine had acted with wonderful success. But where they had to inject, as in sciatica; where they had to creep about for the position, the success was not so brilliant; and where the pain was beneath the surface they did not get success. But in cases of extracting teeth it was of the highest value. Mr. King was kind enough to take out four or five stumps for him at one time. He was immensely pleased, and wanted him to go on, but unfortunately he had no more stumps. He had been nervous about taking gas or chloroform, but he was perfectly comfortable after taking cocaine, and with the exception of one tooth, where the cocaine did not go to the root, there was absolutely no pain. They wanted to know exactly the right way to use it, and it would then be a most valuable drug and would be invaluable in extractions where necessary. He believed there was a great future for cocaine when they knew exactly how to use it, and when they had had a little more experience with it. He had used cocaine in two hundred cases, and in only one it was not perfectly successful. No doubt others had met with cases like it. He leaned to Dr. Cunningham's views rather than to Mr. King's. Since meeting with the case he had referred to, he had made enquiries, and in one case he injected cocaine at the elbow, and the hands became so contracted that they had to be forcibly kept open. He agreed that they were a little in the dark at present. He had never exceeded a half-grain dose, and in the majority of cases had been successful.

Mr. MORGAN HUGHES asked (1) did he understand that, in proportion as the parts round a tooth were inflamed, so much was cocaine lessened in its anæsthetic effects; and (2) whether Mr. King was in the habit of testing very carefully the hearts of the patients who came to him, or whether he thought the half-grain dose was perfectly safe, and he ran no risk of bad effects afterwards. He thought the statistics were valuable as showing in the great majority of cases that they could give cocaine safely, but it seemed to him that there was a certain percentage of failure. In some cases cocaine had been used by medical men with fatal effects; at any rate, one or two such cases had been recorded in the *British Medical Journal*.

Dr. J. WARD COUSINS expressed his gratification at being present, and he hoped they would have another meeting in Portsmouth before long, as the medical men of the neighbourhood would be happy in any way to co-operate with them in their debates. He thought with Dr. Guillemard that they wanted to study the action of cocaine; and with reference to the case mentioned by Mr. Stainer, he might say that he was in the case with him. They should not lay stress on a case of that sort either for or against cocaine. It clearly was the case of a young man of a highly excitable disposition and temperament, and from an analysis of the symptoms at the time, they appeared to be first epileptic, which had left very marked effects behind them. He had had some epileptic tendency, and now it had been ascertained he had had previous epileptic attacks. As regarded the dose, that was a matter of great importance, and when a gentleman spoke so bravely of half-grains, he should think it was a great mercy that the absorption was exceedingly slow in that particular patient. Absorption would be slow when applied on the hypodermous part of the gums, and slower still in the cellular tissues of the body. The administration of all local anæsthetics, as well as anæsthetics generally, must be attended with a certain amount of anxiety. In his hospital and private practice he was constantly administering anæsthetics and using cocaine for minor operations, and if they could use these remedies to relieve pain and suffering and suspend consciousness without risk, they deserved their earnest study. As regarded the use of nitrous-oxide gas, referred to by Mr. Cunningham, and the danger and fear of bodies falling into the trachea during the extraction, he had a special gag of his invention to prevent the slipping of teeth into the larynx; he did not know whether the gag would succeed. What Mr. King had said in reference to the inflamed state of the gums interfering with the action of cocaine, exactly bore out what he had found in his ophthalmic practice, for inflamed eyes did not get that assistance from cocaine as those that were not inflamed, the absorption being interfered with by the congested condition of the mucous surface.

Dr. R. E. POWER (medical officer at the Convict Prison) said he had used cocaine in a good many cases. He had cut off a man's thumb, and after dotting the member with cocaine, the operation was perfectly painless. On one occasion he was not quite so successful, when he went beyond his province and drew

a man's tooth. He followed the advice of the *British Medical Journal*, and injected a half-grain, and the patient became giddy; and on another occasion he injected the entire dose at once, when the patient fainted at once. In the cases where he was unsuccessful he injected the whole dose at once, and where he was most successful he injected it slowly and frequently. In one case he dropped the solution on the tissues underneath the eye with no pain at all in the results.

MR. SMITH-TURNER said they knew that when they administered gas or any of the commonly used anæsthetics, they generally tried to prepare the patient for the administration of the drug, and they generally enquired into the diet and occupation, and paid a little attention to the habits of the patient. He wanted to know whether any of those gentlemen who had administered cocaine had made these enquiries, or whether they administered it regardless of the contents of the stomach or what the patient had been doing, because these enquiries might have an important bearing on the effects of the drug.

MR. T. SCOTT FOSTER said he could not refrain from saying that his experience of the use of cocaine had been different from that of Mr. King. Like most dentists, he at one time became very enthusiastic about it. But one morning an elderly lady wanted a stump extracted, and he injected one grain. After waiting some time for the effect, the patient presented an alarming appearance. The face became blue, the lips purple, the breath short and panting, and the pulse almost imperceptible. He, being alarmed, induced her to lie down, sponged her face, administered a stimulant, and in twenty minutes she was able to leave. The lady afterwards came to him to have the stump removed, and he did it under gas, with no more trouble than he generally met with. From that day he dropped injecting a one-grain dose, and commenced to use a half-grain, but he confessed that he had not met with the success that others appeared to have had. In some cases he thought the imagination must assist them. Now a short time ago a quack came to Portsmouth, with four horses, a gilt carriage, and a brass band, and every day he extracted teeth for a hundred people, in the presence of a large crowd. There must have been a great many smashes, but the majority of the people positively asserted that there was no pain whatever, and no blood. That was clearly wrong, for he (the speaker) had to extract a number of stumps afterwards. At nine o'clock one night a poor fellow came to him in this condition, and bleeding

terribly, thus proving that what had been said about the quack was the result of imagination. If dentists had the assurance of the quack and could deceive people, by some mystic performance, into the belief that they could take out teeth without pain, they would find the same result. The imagination was so played upon by the man's brass band, by the crowd, and by his assurance, that they actually believed they felt no pain.

Mr. A. KING then replied on the discussion. Some of those who had had trouble with cocaine had not told them how long it took them to apply the injection; others had said that they took two or three minutes. Now to inject a half-grain ought to occupy not less than ten minutes. He had read accounts of those who had tried it in a few minutes, and two or three of them were bad cases. In his earlier days with cocaine he found that whenever he used it quickly there were unfavourable symptoms, but where he took a longer time the symptoms were less unfavourable; and where it was done slowly there was no difficulty at all. Since then, and throughout the whole of last year, he had injected it very slowly indeed. In answer to Mr. Morgan Hughes, he said he had used it on a patient who knew that he had a weak heart, and he had to use a one-grain dose, with ten per cent. solution, to satisfy him. The patient's wife had used it, and said she did not mind risking the effects. To please this patient he injected one grain, took out two roots, and the man did not feel any pain at all. Dr. Power bore him out as to the length of time required for the injection, and with regard to dotting the parts with the injection, he had found it better, when taking out five or six roots, to inject at several different places, as it gave less pain than if they used the whole quantity upon a single root. Mr. Scott Foster did not speak as to the length of time, and Mr. Baudry had told him privately that in the case where he used two grains it took three-quarters of an hour for the injection. He had been successful especially where using a larger dose than half a grain; but now he never took less than ten minutes.

Mr. GEORGE CUNNINGHAM next proposed the following resolution:—

“That this Association is strongly of opinion that in the interests of the State, some provision should be made for attention to the teeth of our soldiers and sailors, and that the special committee appointed by the British Dental Association for that purpose be encouraged to bring the matter urgently before the proper authorities.”

Coming down in the train, he read a speech by Mr. W. H. Smith who, in a debate on the Army estimates, "pointed out that the Government welcomed the assistance of hon. members in all parts of the House in seeking to remedy evils, and it was not the first time he had said so in that House. The Government held to the principle of the individual responsibility of servants of the State, and they were prepared to enforce that responsibility. Wherever evils could be pointed out in a system, or if the system itself was bad, the Government desired to find a remedy, and they would accept the full responsibility which belonged to them in their effort to do so." The House of Commons replied "hear, hear," and he hoped that a meeting like that would respond "hear, hear," also. Sir John Simon, in presiding over the Section of State Medicine at the International Medical Congress, put the matter in a very plain way; of course their contention was that State medicine should include State dentistry. As they knew, the paper read by him, which advanced that question before the Association last year at Glasgow, had been followed by the formation of a special committee of the British Dental Association, and it was for the purpose of asking the support of the Branch in encouraging that committee in its work that he was there to ask them to carry the resolution. Sir John Simon thus axiomatically defined the position of State medicine:—"Given the class of experts to supply the required exact knowledge, the body politic undertakes that, within the limits of its own constitutional analogies, it will make the knowledge useful to the community." They had heard what the head of the body politic, the leader of the Government had to say from his place in the House of Commons, and the question naturally arises as to how far the Government was prepared to remedy the evils to which they, as dental practitioners, have deemed it of the utmost importance to call the attention of the responsible servants of the State. As far as State dentistry was concerned, they were the experts; and it was therefore clearly their duty to do all they could to bring any evil, if it existed, in the system of medical administration as applied to the Army and Navy, prominently before the attention of the authorities.

First, then, as to the Army. The most prominent point to which he could call their attention was the complete recognition of the necessity for their present agitation, contained in the report of the Director-General of the Army Medical Department

for 1857. After enlarging upon the advantages to the functions of digestion and nutrition which would follow from the repair of the teeth, he pointed out that the effect of unsound teeth was the direct cause of inefficiency and unfitness for military service. And he added, "I am of opinion that a considerable gain to the service, besides comfort to individuals, would accrue from a more improved practice in dental surgery than that which has hitherto obtained in military life. I therefore hope that medical officers of the service will co-operate with me in endeavouring to introduce into military medical practice the improved modes of treatment now all but universally adopted in civil life." That circular was issued in 1857, and the reply of the medical officers was, that as they had not received practical instruction in a branch that absolutely required it and were not supplied with the requisite instruments, it was impossible to render the service required in the circular. That was a very clear exposition of the situation at that time—a situation which has not been materially altered since, except by the immeasurably greater advance which has meanwhile been made in all that pertains to dental science.

In 1859, a report was presented to the Military Department of the Madras Government on Dental Surgery, by Dr. H. W. Porteous. A resolution was then passed that a medical officer in every European regiment be instructed in dental surgery, and the Commander-in-chief was requested to issue such subsidiary instructions on the subject as his Excellency might consider necessary for giving it effect. Dr. Porteous at once made arrangements for carrying out, in the 44th regiment, stationed at Madras, the provisions of the former resolution, and practical instruction was given by him to the assistant-surgeons twice a-week. The success of the system pursued was, in that instance, so far satisfactory that it was only necessary to extract three teeth; two of these on account of alveolar abscess, and one in which the filling had induced more irritation than the patient was inclined to bear. The report continued:—"By the extension of the present system of instruction in dental science to assistant-surgeons of the Army generally, it is hoped that the practice of extracting every aching tooth will be reduced to within the narrowest limits, and that the arrest of decay in teeth soon after its detection, will be the means of preserving many of our soldiers' teeth which, under the present system, are sacrificed whenever they begin to be painful and troublesome." In 1865, Surgeon-General Balfour reported that

he was specially appointed to enquire into the health of the troops stationed at Secunderabad, and a letter from him stated that instances occurred of impaired assimilation from imperfect mastication, and that a good dentist would preserve the teeth of many soldiers. Upon this point he might mention that in the past it was necessary for an army medical surgeon, on entering the service, to produce a certificate of having an ordinary knowledge of dentistry; even if it only consisted of the extraction of teeth he was required to know something about it, but now-a-days he was not required to know anything at all.

Now was there any existing necessity for attending to soldiers' teeth? He would remind them that it was found, as the result of an examination of a hundred candidates passing through a recruiting station, ninety-eight were pronounced by a dental expert as being likely to benefit by attention to the teeth. True, a certain amount of the disease present was slight, but it was just of that kind which would lead to more disastrous consequences in the future, if neglected. He had with him the evidence of a deputy surgeon-general, in which he said that of late years the subject of dental surgery had not received the attention which its importance justified on account of the short service system obviating the aggravated instances that were so common in the old soldier; but judging from his own experience only, the demand for dental instruments other than those for extraction, was very limited indeed.

But as a matter of fact, the Government did make some provision, but what was the nature of it? They provided a case of tooth-stopping and scaling instruments, scalers and stoppers (4), excavators and roseheads (3), sheets of gold leaf, amalgam, gutta percha and leather case, costing 38s. The matter had been brought before the authorities, and it had been pointed out that the equipment was absurd. Then this equipment was so bound up with impossible restrictions that it was incapable of use. Take Portsmouth as an instance. Portsmouth was the head-quarters of a military district, which extended as far as Devizes. Supposing a soldier at Devizes had the toothache, the surgeon must make a formal application for the equipment, because it was kept at head-quarters. On being inspected and passed through various hands and various forms being filled up, it would be sent to Devizes, after which the medical officer was responsible for returning it in good order. On being sent back it

was again inspected. With a routine like that, did they believe there was a case of tooth-stoppers that ever went through such a peregrination? He had endeavoured to find out how the gold foil was used, for the case did go back occasionally to the central headquarters, to have the gold foil refilled. That was the only point he had ascertained. Presumably it was refilled, but there was no return made of this.

Taking it that these points had been made out, there was still one other point of great importance, and that was, that as the medical officers replied in 1859, so the medical officers to-day replied, "We have no instruction in dental surgery," and they also said that a special training in so special a branch was necessary to this being carried out. It might be useful to hear what the Army Medical Department said about it, and this was an official letter he had received:—"On behalf of the Director-General, I am to inform you that the case of dental instruments provided for use in Army Hospitals is considered sufficient for the requirements of the service. At the same time I am to remark that medical officers are not confined to the use of the instruments contained therein if it seems fitting to them to obtain others." He did not wish to say anything prejudicial to the authorities, but pressure must be brought to bear, and it must be brought from outside. It rested with them, the press and the public. This question had attracted notice in foreign countries, not to mention the literature of our own country, which they could not thank too strongly for such support as had been given. It had received the favourable attention of other papers in Germany, Austria and France.

And now he invited their attention to the question as it affected the Navy. In the Navy there was no such ridiculous equipment. There were no published regulations, and therefore he could say nothing about them. The naval medical officer was expected to provide his own equipment, and having no special training in dentistry, he did not provide himself with any instruments except the forceps, and instead of performing what he considered a rather disagreeable function, he usually delegated the extractions to the sick bay steward. That was how the teeth of the sailors were treated. Now there could be no short-service excuse in the Navy, for there we had the long service, and attention to the teeth was of supreme importance, for men were carried away to all parts of the world, where they could not have the resources

that were available to the soldier, who might, if the Army medical officer had no proper facilities, be sent to a civil practitioner. The recruiting order affecting the Navy was a very important one, and if by any manner of means they could extend the field of recruits they had a strong claim upon the thanks of their fellow-countrymen, because they could thereby render the Government a substantial service. It had been pointed out by Mr. Fisher that the regulations affecting the recruiting order were absurd, whereas if they would employ dentists with proper skill, they would have more efficient recruits coming up. To prove that point he would call their attention to an experiment made by the London recruiting department. In 1885, the Admiralty entered into a contract with the authorities of the Dental Hospital of London, by which the latter, for a certain subscription, undertook the dental treatment of all the recruits they might send during one year, and forty-nine were so treated. Thus forty-nine men who were otherwise efficient would have been thrown out of the service because of the condition of their teeth, but they were sent to the hospital and were so made efficient. That being the case, the committee of the British Dental Association petitioned the Admiralty that a dental expert should be allowed to examine all recruits passing through a recruiting station, with the view of advising the Government as to the best way in which the services of the dental surgeon might be utilised for the benefit of the community. The reply in effect was "No, thank you." They would hear more about that, and it was important that they should. An interesting point in connection with the experiment by the Admiralty was how it originated. Did they think it originated from the Medical Department? He knew for a fact that it was not so, but it originated with an enlightened and far-seeing Naval Lord of the Admiralty, who procured the experiment. Experience of the working of any Government Department would bear out this fact, that the conduct of experiments of this kind might be active or inactive, according as an official supposed the result would be received at headquarters. Was such an arrangement satisfactory? While expressing their satisfaction at so practical recognition of the benefits derivable by the State from the services of the dental practitioner, they must enter a protest at the nature of the recognition. Was it fair for the State, instead of employing the services of the fully qualified dental practitioner who, in accordance with the regulations of

that very State itself, had expended a prolonged period of study, at a considerable cost, to so avail itself of the advantage of a purely charitable institution, mainly upheld by the profession itself, and where the operations were necessarily executed by dental students? Provided the services of fully qualified dental practitioners were employed, he would ardently recommend the Lords of the Admiralty to extend the scope of the experiment to the recruiting stations throughout the country, as the necessary corollary of the success of the present experiment. It might be said that this was a question of economy and expense, and it might also be said that as in these days an absorbing question was the cutting down of expenses, it was an inopportune moment to bring this question forward, but he could prove that attention to this matter would be a beneficent economy, and in no sense an extravagance. The proof was to be found in an experiment made at the General Post Office, Dublin, where there were a certain number of absentees in consequence of the condition of their teeth. In that case there was a grant of £10 to the Dublin Dental Hospital, and the absentees on account of bad teeth were reduced from twenty-two to seven per cent. Had he proved that there were evils in the present system of medical attention provided for the services? It has been before the authorities, but with no result. What could they do? Their duty, as contributors to the public funds and in justice to their fellow-tax-payers, was to force this question on the Government, which boasted its desire to find a remedy, and would accept the full responsibility which belonged to them in their effort to do so.

Surgeon-Major CROWE, Army Medical Staff, said the question was one of very great importance. He had served upwards of twenty years in the Army, and his experience as a soldier fully supported the views of Dr. Cunningham. Many a soldier was invalided owing to ill health caused by defective teeth, and he considered that if the British Dental Association would bring such pressure to bear on the authorities as would oblige them to give the soldier proper dental attention, the Association would prove a good friend to the soldier. Abroad, particularly in the West Indies and India, soldiers suffered much from decayed teeth, and were practically without assistance. Medical officers in the Army were not required to know anything about dentistry to qualify them for a commission, and as they got no training while in the service, the soldiers received no attention. The only dentistry he had seen in

twenty years was the extraction of teeth ; as to stopping teeth he had never attempted it, and had never seen it attempted. He seconded the resolution.

The HON. SECRETARY said there could be no two opinions about carrying the resolution. The President told him that he had issued a number of invitations to naval and military medical men, and the invitations had been accepted, but unfortunately the officers had been called off by duty, and naval men were so active just now that they did not know their locale from day to day. He hoped that Dr. Cunningham's speech would be placed before the Members of the Association.

The resolution was then carried.

THE ANNUAL DINNER

Was afterwards held, when in addition to those who attended the meeting, there were also present Drs. A. M. Garington (Oxford), Burford Norman, F. Driver, H. R. Smith and Coran Doyle.

The string band of the Royal Marine Artillery were stationed in the corridor, and played a selection of music during the evening.

After the usual Royal toasts had been duly honoured,

The PRESIDENT next gave the "Navy, Army and Volunteers," and

Dr. H. R. SMITH, surgeon-major in the Portsmouth Volunteers, having responded,

Alderman RYMER gave the health of the "Medical Profession," a toast which, he said, would be received with enthusiasm. The services of the medical profession at large were universally acknowledged ; their services to the dental profession during the last thirty years were well known by all present. They had assisted the dentists from the first in the great effort they had been making these thirty years nearly, towards the attainment of a high professional position, and the support that had been accorded them had been of infinite value, as the medical profession had aided most materially the dentists, in securing the position to which they had now attained. Under these circumstances, they would drink heartily to the health of the medical profession, a profession to which they had the privilege of being allied. With regard to the proceedings of that day they had had the great pleasure of seeing

among them a number of representative members of the medical profession of that most important town, and more would have been present but for circumstances over which no control could be exercised; but they had had at the afternoon meeting, and again at the dinner, the company of gentlemen who were honoured and respected in that great town. The interest in the important discussion on cocaine was materially added to by the speeches which were made by representative members of the medical profession, and by the information which they afforded.

Dr. A. M. GARRINGTON said it had fallen to his lot to reciprocate the feelings that had prompted them. The medical profession attended there with a double pleasure—first, to show their esteem and regard for the worthy President, and secondly, to extend to the dentists the right hand of fellowship. He assured them that the medical profession, regarded them as fellow-workers in the same grand profession, striving their utmost, as they all did, in the interests of science and the amelioration of the sufferings of mankind. He trusted that their visit to Southsea would be of benefit, and of some pleasure to themselves, and if at any future time they selected this as their place of deliberation, the medical profession would be only too glad to welcome them in the same hearty manner.

Dr. AXFORD proposed "The British Dental Association, and Southern Counties Branch," coupling with it the names of Mr. Smith-Turner, Chairman of the Representative Board, and his very good friend, Mr. Cornelius Wheeler, who was this year President of the Southern Counties Branch. He proposed the toast with the greatest possible pleasure, because such Associations were of very great importance, and, as far as he understood, their Association ran *pari passu* with the British Medical Association, which now spread far beyond the limits of the little island of England. He could not but wish that their Association might spread in equal ratio. He was informed that it was only eight years old, and if that were so, he must congratulate them on the advance they had made in the time, for their Association covered by its branches nearly the whole of England, Scotland, and they now possessed an Irish Branch, and, he understood, were looking forward to holding their next annual meeting in Dublin, and there could not be a question that it must exercise a great and beneficent influence on the dental profession throughout the United Kingdom. These Associations, they found by experience, were of

the greatest importance in raising the general tone and character of the profession, as there could not be a doubt that the British Medical Association had raised the medical profession in a way that was most astonishing, having given them a position very different from that they occupied before the Association was started. They were right in thinking that the formation of such an Association as they now had would have an equally satisfactory influence on the dental profession; and he hoped it would become more and more so. His wish was that some day, perhaps in his own life, he might see that dental surgeons would be dental surgeons in reality—real medical men in every way, and, instead of being as now, a separate specialism, dental surgery would form part of the medical profession, just as other specialisms that they heard so much about. This seemed to be an age of specialisms. Many men objected to specialisms, but the more he thought about it and the older he grew, the more he was convinced that specialisms were necessary. The extreme depth of study required, and the way in which men must give up their minds entirely to the study of one particular branch, made specialisms an absolute necessity. It was not like going by the old rule of thumb, when scientific instruments were almost unknown; but now-a-days men's studies did not cease when they left the college or the hospital, but went on through life, and those who rose and became great men, either in general medical study or in specialisms, were those who carried on their education day by day and year by year, almost through life, and so it would be in any specialisms that they might take up. The more they bound themselves together to carry out the great objects of their work, the more thoroughly would they carry on their work in a scientific way, and the more unselfish and painstaking they were, the more thorough and complete would be their good, and the better standing would they have throughout the country. He congratulated them on the work they had already done, as their Association aimed at the same objects as the British Medical Association. They (the dentists) had central meetings once a year for the whole profession, besides the branch meetings, which were so very important. He thought that more was sometimes done at the branch meetings than at the general meetings, as they did a good deal more work. Branch meetings should be especially cultivated, because the more frequently they met and discussed the various points arising in the profession, the more thorough would be their work and the greater

progress would they make. There was another point in which they exercised an important bearing—from the Parliamentary point of view. In the Medical Association they had a Parliamentary Committee, and through that Committee they had exercised a most important influence on Parliament in the way that the medical profession was now recognised in the Army and Navy, and if they carried on their Association in the same way—and no doubt they had something in the shape of a Parliamentary Committee—dentistry would be equally recognised, for it was most important that it should be recognised in the education of those gentlemen who, belonging to the medical profession, passed into the Army and Navy. He believed that so far that branch of study had been neglected. There were some difficult points yet to be considered. They knew how very much in the medical profession they required a more stringent Medical Act than they had at present, and from all that he could see and hear, there was great scope for the stringent exercise of the law, and control over gentlemen who, without any pretence to a proper scientific education, pretended to practise the art of dentistry; and that was a point to which they should pay great attention. He very much regretted that he could not be present at the discussion in the afternoon, as he would have been particularly interested in the paper on cocaine, a drug, he confessed, that he found of great use in several ways. He supposed that the Representative Board was something like the Council of the Medical Association, and if the Chairman had such hard work as had the Chairman of the latter Association, he justly deserved to have his name drunk with most enthusiastic cheers. After such a splendid banquet they would also drink the health of his good friend Mr. Cornelius Wheeler, who had been his good friend ever since his (Dr. Axford's) residence in Southsea, and he hoped that the pleasant relations that had subsisted between them so long would continue as long as they practised in Southsea.

Mr. SMITH TURNER, who in rising to respond, was received with loud applause, said that in replying to the toast of the "British Dental Association" a cloud of conflicting subjects so jumbled themselves together in his mind that he scarcely knew which to touch upon first, or what to leave unsaid. The speech of the gentleman who had so eloquently proposed the toast was pregnant with a number of ideas concerning them most intimately; but at present it seemed to him that they were in the very infancy of the

struggle they were making for something like professional position and professional recognition. He would say for the information of those who did not know what they (the British Dental Association) were doing, and for the information of the medical profession, that the position they were seeking to attain they were seeking on solid grounds, they were not seeking a name alone; they were not assuming the name of a profession; but they were, through the operation of the Dentists' Act, endeavouring to provide the public with a class of men who would serve them efficiently as public men, and who would do credit to the medical profession by being associates with them. It was difficult for medical men to realise all the troubles that beset the dentists, but he thought the dentists in the southern districts were more fortunate than those situated in other parts of the country, such as London and other densely populated districts. If the members of the medical profession would tender to the dentists the same professional consideration as they tender to each other, and give them credit for being actuated by the same feelings, the medical profession would do them an immense amount of good. They could scarcely conceive the way in which medical men, even now, after these long years of struggle, looked upon dentists. They probably formed their opinion upon what they saw, and one could scarcely blame them. They all knew what excrescences attached themselves to the profession, and they naturally thought that anything was good enough for a dentist. Not long ago a medical man in the Midland district appealed to the *Lancet* against some remarks made about him by the dentists, because he was in the habit of going to the house of one of the greatest charlatans, a disreputable practitioner, and administering anæsthetics; he appealed to the *Lancet*, and the *Lancet* gave him the reply that he deserved. That was a sample of the way in which a large number of the medical profession would treat the dentists, but he hoped by-and-by as they progressed in the number—the educated number—who entered their profession, they would be better considered by the medical profession. They were greatly indebted to the medical profession for what they had done, but they had a great deal yet to do for the dental profession. Last week he was shown a circular issued in London and published in a London paper—not as an advertisement—by an irregular practitioner in the west of London, and this man had a certificate from one of the leading physicians in one of the leading metropolitan hospitals, which hospital had laid itself

out for the education of dental students. That was another sort of thing done by medical men, unconsciously and unwittingly, but terribly to the disadvantage of the dentists. In London there was a dental institution worked by a man named Partridge, who was deprived of his legitimate right to practise; he was removed from the Register, and yet they had this man's circulars sent all about London with at least eight or ten names of reputable practitioners attached as countenancing his mode of procedure. The circular was headed "Partridge's Dental Ladies' Institute." While they were trying to elevate themselves such conduct on the part of members of the medical profession handicapped them terribly. He hoped the gentlemen who were present would not think he was animadverting upon them, on the contrary, their presence showed how well they were inclined towards the dentists, but it was because he thought they were well inclined that he ventured to name these grievances. Another important question had been started by the gentleman who proposed the toast of the "British Dental Association," referring to the education of dentists. He compared them to specialists who became fully qualified practitioners, and who followed out their specialities afterwards. Now he would remind the medical men, and his friend who had so eloquently spoken, that the rank and file of the dental profession, though they might be called specialists, really ranked as ordinary practitioners, just as the mass of members of the medical profession was composed of the general practitioners. He believed that out of these they would always find a certain number of men who had time, money, and ability, who would take additional qualifications; but as far as they had been able to go at present he believed that the present dental curriculum was, if followed in its entirety and conscientiously, more than sufficient to qualify the dentist for the proper exercise of his profession, and more than the public would ever pay the dentist for. When a man entered a profession and spent time and money in acquiring his knowledge, he must expect from the public a certain remuneration. Now the general practitioner in medicine had that remuneration, and he attained his professional position by following a certain curriculum, and studying, in round terms, for about four years. He had to pass his preliminary, and then to go through all the ordinary studies, which occupied him three years and nine or ten months, to qualify him for the diploma of the College of Surgeons and Physicians or any of the other licensing bodies. That was con-

sidered a fair investment of time and money to qualify him to appear before the public as a general medical practitioner; but if he was going to be a specialist or take the higher walks of the profession he had to add to that a few years' longer study; as in the case of the M.D. of London, or a Fellowship of the College of Surgeons, a man must, after a considerable time, take an additional course of study and be attached to one of the hospitals before he could become a consultant. Probably as dentistry went on they would find a number of men who would follow the example of a considerable number of the present members of the profession who had become Members of the College and Fellows of the College and taken higher qualifications, for it was desirable that men who were going to teach the rising generation should have such additional qualifications as would give them the status that would command the respect and attention of the students. But if they were going to put upon the general dental practitioner the full medical curriculum they exacted from him an additional amount of study such as they exacted from the members who took the higher walks of the medical profession. In this way. The dental curriculum was precisely the same in the matter of time—he would not enter into the question of expense, but probably it was considerably more—as the curriculum demanded of the general medical practitioner. He had to enter by the same portal. The medical and the dental student had to commence with precisely the same studies, the dentist taking surgery, anatomy, and medicine and other matters along with the medical student. The dental student then, instead of following up with midwifery and pharmacy, diverged, and followed a special branch of his profession. He had to attend dental hospitals where he was instructed in operative dentistry, practical dentistry, metallurgy, chemistry, dental surgery, dental anatomy, and dental physiology. It then took him some time, even if he employed his time fully and worked industriously, before he could go up for the L.D.S. That occupied exactly the same time as had been spent by the student who started with him and who went up for a membership of the College of Surgeons, so that the dentist at present entering on the dental profession expended the same amount of time to qualify for what they were pleased to call a speciality, as the general practitioner followed before starting on a general practice. Therefore, if they imposed upon the dentists, perforce—he did not say anything against voluntary effort—and by law the condition of being a medical

man also, they imposed upon him at least two years' further study. He left it for them to consider, supposing they were bringing one of their sons up to a profession, and the alternative they had was bringing him up to the medical profession, where he would become a general practitioner in four years, or the dental profession, where he could not become a dentist under six years—he thought, apart from the question of justice to the man, it was giving the public too much for their money. But he would also put it on the ground of utility. The general practitioner was aware that he had forgotten a great deal of what he had learned as a student; and the dentist, as soon as he got into practice would forget all that he learned as a medical student, and would, if he wanted advice, go to a man who was in practice. At any rate, he would be sorry to trust to anything that he learned when he was studying for a membership of the College of Surgeons, and that would be the general result of two years' extra study. He did not say this because he did it himself, nor did he regret having done it, but because it was too much to impose upon the dentists as a class, and because they would impose more on the dentists than they imposed upon the general medical practitioner. He congratulated the Southern Countries Branch on the show they had made that night. To himself, who had been associated intimately with the movement from the first, it was more than gratifying to go to a meeting like that, and he hoped that the Branch would extend further westward, and that they would see other Branches rising up. That Branch had gone on steadily and gradually and had not assumed the peculiar phase which had taken hold of one Branch, and become a mutual admiration society. He congratulated the Branch upon having come to so important a town as Portsmouth, which was a right and important step to take, upon the excellent meeting they had had, and upon their having enlisted the sympathy and kind consideration of so many of the medical practitioners of the town. He thanked them for having listened to him so long, and for the kind way in which they had drunk his health.

The PRESIDENT, who was received with applause, said he was proud to have also to respond to the toast, having had his name coupled with it, but he scarcely knew how to respond after the excellent speech of Mr. Smith-Turner. Many of them had heard him speak before, and were therefore not surprised to hear him again now. No man engaged in dentistry had taken more interest

in the profession than Mr. Smith-Turner. He was one of their pioneers, and he (the speaker) was particularly pleased that Mr. Turner had had an opportunity of expressing himself in the presence of medical friends, for the more they knew how the dentists were trying to raise their profession the better would they think of them. He was rather reluctant at first to preside over this Branch of the Association, but when it was pressed upon him he felt that it was a duty, and having taken up the office, he trusted he would be able to do something to help them. At any rate, he would endeavour to do the best he could. He was particularly pleased to follow his friend Alderman Rymer, who was the first he had ever heard in public to advocate the cause of dentistry. When he (the speaker) first entered the profession he was rather ashamed to have his name associated with dentists, because thirty years ago they were not proud of being called dentists, and a good many of them even now would rather hold their tongues on the matter. But that feeling must eventually die out. It was such men as Mr. Turner and Alderman Rymer who had brought about the Dentists Act, and dentists would be ever grateful to them for it, though much was yet required to make the Act perfect. Nothing but bringing pressure to bear on the authorities would produce any alteration in the Act, but combination gave them strength, and the more the dentists combined, and the more persistently they put forward their demands the more likely were they to bring about a better state of things. The education of dentists was very different from what it was years ago, though he quite agreed with Mr. Smith-Turner, because they could not expect a man to enter a profession when he had to wait seven or eight years before he was allowed to practise dentistry. If a man had to qualify first as a surgeon and then as L.D.S. they imposed too long a course of study on him, and were exacting too much. He believed now that if the qualification of a dentist was better understood it would be better appreciated. It was not only they as dentists who reaped the benefit, but it was a great national movement and the public also reaped the benefit, but at present they had such men among them calling themselves dentists that there was no wonder professional men were ashamed of their occupation, and sometimes he really did feel ashamed of it. He hoped the day would arrive when such men would not exist in the profession. They had men calling themselves by titles that they had no right to claim, and medical men must know something of

their feelings when they saw how men styled themselves "Doctor" when they had no more right to the title than a cow. He thanked Dr. Axford for the kind way in which he had spoken about him, for he fully appreciated it. Ever since he had been in Portsmouth his medical friends had held out the right hand of fellowship to him and treated him with the greatest possible kindness and consideration, so that it was a source of great gratification to him to see so many of his medical friends around him now.

Dr. DRIVER gave "the Benevolent Fund," and remarked that every medical man present felt glad that he had come. He would not, however, have them to suppose that medical men had any idea of patronising them; they came there feeling that they were fellow-practitioners; he felt that there was a bond of sympathy between them, and medical men were now repaying a debt that they owed the dentists. Every medical man present felt that he owed a very great debt indeed to the dentists, and for himself he could say that he had frequently been helped out of a difficult case by the assistance of his dental friends, for when they had a difficult case they must go to the dentists. They would be pleased to know that in Portsmouth practitioners did not try to combine medical and dental work, but they tried to leave for the dentists that work that properly belonged to them. The sympathy that medical men felt for the dentists was certain or sure to grow, and he would be only too thankful if the remarks made that night became fruitful in the direction of giving to all dentists who were not afraid of hard work—for difficulty represented hard work—a degree in dental surgery—not a foreign degree, but a degree granted by the old universities, for a degree of London, Oxford, or Cambridge, should be within the grasp of every man who was inclined to work. But that must represent work, or it would be thoroughly useless. It might take a longer time—he did not say it would require greater ability—and more application, and possibly a little more expense, but it would be worth their while, as that was the only way of raising their profession to a perfect level with the medical profession. He did not see why they should not occupy the same position as medical men; they were partners at the outset of their career, they had almost the same training; they stood on the same level as students, and he believed that eventually the present feeling of disparity would die out. And it would die out because the cause of it would die, and the causes were such as had been alluded to by Mr. Smith-Turner. These

causes were prejudicial to the dentists as a body, and could only be overcome by their consolidating themselves and standing on a more uniform level. There were some men practising with good qualifications and others with no qualifications at all ; but it should be possible to stop a man from practising if he had been denied or deprived of his legal qualifications. He believed they would get that by and by, but if they wished to raise themselves they must do it by aiming at a definite object, and that should be a degree in dental surgery in one of the old universities. Now it would appear a mere platitude to say that the Benevolent Fund was necessary, but he was surprised to hear that, after seven years, they had only arrived at a promiscuous method of contributing to the fund and distributing it. Their senior but sister profession (the medical) might perhaps give them two or three hints in that direction. They had a similar fund—it was not called a benevolent fund, though it answered the same purpose—among the members of the British Medical Association ; they had a life insurance fund, a pension fund, and they had also a sickness fund. The question therefore arose whether, as the dentists had so many young men just entering the profession, it was not worth while to bring the Benevolent Fund out on a more substantial basis, for it did not seem to him to be on a substantial basis at present ; and in order to do that they ought, as far as possible, to make a claim on the younger members of the profession. He would remind the younger members that they would not always be well ; they would not live for ever, and, besides that, eventually they would become too old to do their work with ease and comfort to themselves, and if the prosperity that had attended the development of this branch of the British Medical Association work had any recommendation—and he could prove that it was required among medical men—it would be well for them to study the rules which governed the administration of the fund and the mode in which the members of the profession were admitted to its benefits, as well as to make themselves acquainted with the extent to which these benefits ran. That, however, was only a suggestion on his part, but he thought it was worth their while to consider it ; but whether they did so or not he hoped the fund would be very largely increased during the following year. It was the duty of every man belonging to a profession to put by a small donation every year for the benefit of those who fell into unexpected trouble, for there were certain to be men who would either

meet with accident, die suddenly, or leave a widow and family unprovided for. The more numerous their membership was the more urgent would be the calls on their funds, and in order to meet these demands they should always have a certain substantial amount invested, and be always able to depend upon a certain number of annual subscriptions. These might all be ideas that had previously entered their minds, but possibly by being put forward in this prominent manner they might strike his hearers in a way that they had never struck them before, and lead them to see that it was not only a pleasure to contribute to the funds, but an actual duty.

The HON. SECRETARY responded. He had to thank the gentleman who had proposed the toast for the interest he had displayed, and for the way in which he had brought the subject of benevolence before them. He was sure the remarks that Dr. Driver had made would not fall on dry ground, but that they would fructify, for he had no doubt they would be able in the future to do far more than they had been able to do in the past. The Fund was in its young days yet, but he was fairly satisfied with the amount of success that had attended it so far. There were a large number of men who were not members of the Association, and who had not got into the habit of regularly subscribing, but who would very speedily do so. Hitherto the Fund had been administered entirely on a charitable basis. At present they were only at the commencement of the undertaking, but as they advanced and had a fair amount invested, no doubt wiser heads than had hitherto managed its affairs would come to the front and carry out the ideas that had been so ably propounded to them. At all events he would be glad to support the carrying out of such views in the future. But first he wanted to see an interest taken in the Fund by every member of the profession. They had had papers laid before them during the evening, but he would like to say that those papers were not intended to personally apply to subscribers to the Fund, though if they fell into the hands of only one or two gentlemen who had not formerly subscribed, after the remarks of the proposer of the toast, they would not hesitate to promise a donation. During the last few weeks they had had an urgent case put before them from Exeter, but the administrators of the Fund were very sorry that they were unable to render any help, their fund having speedily dried up during the year. They knew the men who administered the fund, and they knew the care and

attention which the administrators bestowed on their work. They tried not to pauperise those whom they relieved. They tried in all cases so to administer the Fund that the recipients should be able to help themselves. They tried to set up the widows in business; they tried to educate the orphans; they helped the recipients to pay rent, and so in some tangible way they did a permanent good. He would mention one case in which they had been able to render valuable assistance. During the last few weeks a man highly respected in the West of England—a young fellow only thirty years of age—died from pneumonia, leaving a widow and children. He had insured his life to such an amount as he felt he could afford, but suddenly he was taken from his family. The clergy and medical men of the district came forward to assist the widow and family, and the Benevolent Fund being unequal to meet so deserving a case, Mr. B. Mason laid the matter before the different Branches of the Association, and he was glad to hear that upwards of £600 had been contributed. He could very much have wished that the case had not had to come before the profession outside the Benevolent Fund. He was quite sure that if they would help the Fund they would never regret it, for anything that they gave would be wisely administered. As time went on they would strike their stakes deeper and get a far wiser administration of the Fund, for there was yet a wide field of insurance before them.

Dr. J. H. REDMAN proposed "the Dental Hospitals and Schools." He said that in the near future dental hospitals must be largely increased, for it was really essential that dental hospitals should be established in every large town. The argument had been advanced that by increasing the number of dental hospitals we multiplied the medical charities and so lessened the funds at their disposal. That argument might hold good were it not for the fact that they increased the number of hospitals for their specialities but not for dentistry. It was most essential, however, that they should have special hospitals for special work, for in the general hospital it was impossible to do the necessary work, as the dentist in a general hospital could not devote the time that was required to do the necessary work. Several hours a day must be devoted to the work, and for that purpose they must have a regular staff of dental surgeons, such as in the general hospital was quite impossible. Dental schools, on the contrary, did not want multiplying; they simply wanted strengthening.

Mr. ARTHUR UNDERWOOD, who responded, said it was a difficult thing to speak on behalf of dental schools and hospitals, especially holding, as he did, the post of lecturer in anatomy, in the presence of a Branch that included among its members Sir John Tomes. But it was interesting to the student who had at heart the interest of his profession and education to respond for education before a Branch which included as its recent president the name of Mr. Rymer, whose achievements in the advancement of Dental Reform were perhaps a matter of ancient history, but should not for that reason be forgotten. With regard to dental hospitals and their health, which they had so kindly drunk, their health appeared to him to be almost plethoric, for the increase in the London Dental Hospital was so great as to have rendered necessary a great enlargement of their premises in Leicester Square, and to render it a serious question as to what more might have to be done in the near future should rapidity of growth continue. In the National Dental Hospital increased accommodation had been provided, and he believed they had increased the number of their students at an equally satisfactory pace. Moreover, in recent years a very kindly feeling had grown up between the two institutions. An increase in the hospitals meant an increase in the number of students, and therefore they were turning out an increased number of practitioners. That would be a serious matter for them all were it not for the fact that on one single point they differed from specialists in all other directions, for whereas, for instance, they comparatively rarely met with an ophthalmic patient, almost everybody was a dental patient. He did not know that they ought to rejoice, but as a matter of fact they could not look very far without finding somebody who was in dental trouble, and therefore the present enormous rate of increase of accomplished practitioners would not lead them into any great difficulties in that direction. There was one more aspect of the toast worth referring to. Their hospitals were turning out a great number of practitioners every year, and it seemed to him that these practitioners had one very great duty before them; as soon as they were qualified and going to accept the responsibilities of practice they ought immediately to enrol themselves as members of the British Dental Association, and should their happy lot place them in this part of the world, they ought also to enrol themselves in the Southern Counties Branch. That was an absolute duty, and therefore the increasing activity of the hospitals and schools

was bringing new recruits into their ranks, and, might he say—alluding to another capacity in which he sometimes figured—new readers of the JOURNAL OF THE BRITISH DENTAL ASSOCIATION.

The CHAIRMAN proposed "The Press," and asked what would become of their eloquence but for the Press. They were often proud of what they did, but it was only by means of the Press that the public were made acquainted with their achievements, and the public reaped the benefit of what they did. That afternoon they had had a discussion on cocaine, and though they might differ from something that had been said, the public would see that it was of very great benefit to them. He would like to have said something on the subject if he had had time, for he had seen a great deal of what Mr. King had done, and had done it himself. Where he had seen any ill effects from cocaine he was bound to say that he had seen equally bad results from gas. He had had gas several times, but if he wanted a dental operation performed now he would much prefer to have cocaine. Reverting to the Press he would ask, if it were not for the dental journals, how would the reports of their meetings be circulated among the members as they now were. They would have a good report of what they had done that day, and for that they would be indebted to the Press.

Mr. E. MARCHANT responded.

The HON. SECRETARY gave the health of the President, whose name had been associated as a matter of course with the toast of the Southern Counties Branch; it could not be otherwise. But after the splendid day they had had, and the kind and handsome hospitality they had received, they would fail in their duty if they left the meeting without specially recognising the kindness of the President.

The PRESIDENT said he could not allow of any delay in rising to respond to the toast so kindly proposed by Mr. Dennant, and which he had no idea would be proposed. If he had afforded them any gratification it had given him pleasure to do so, and he might congratulate himself on their having had such a fine day, though, of course, he did not arrange that.

ALDERMAN RYMER proposed the health of the local Hon. Secretary who had assisted them so much in bringing about such successful results.

Mr. ARTHUR KING, in responding, said it had given him pleasure to do what little he had done, though but for their kind friend Mr. Dennant the success of the meeting would not have

been so great as it had been. He (Mr. Dennant) had supported him in all that he had done. He had simply been Mr. Dennant's clerk, and was delighted to think that the meeting had passed off as it had.

The PRESIDENT gave "The Readers of the Papers," coupling with the toast the name of Mr. George Cunningham, who had come a long distance and at great inconvenience to himself to speak on a subject in which they were all greatly interested.

Mr. GEORGE CUNNINGHAM said he thanked them for having given him an opportunity to come there and ride his hobby, because, although it amused him, by keeping on they might get men like Mr. Smith-Turner and Mr. Weiss to go in a Parliamentary lair, and with a few strong men to work the thing, and backed by separate branches, he was certain that they would do something to make State dentistry part of State medicine. He had in his pocket a communication from the Admiralty in which they said they did not think a dental expert would do any good in the recruiting department, or that it would do anything to promote the efficiency of the service; but he did not think that any medical man would go away with that opinion. If they came across such a man perhaps they would refer him to the Parliamentary Committee. If dentistry became recognized by the State for the Services, the school question must follow, and that was a question that interested every practitioner throughout the Kingdom.

Dr. H. R. SMITH: It is all a question of economy. The worse teeth a soldier or sailor has the less he eats.

Mr. CUNNINGHAM: Yes: and he requires more medicine; and medicine costs more than food.

The proceedings then terminated.

Eastern Counties Branch.

(Concluded from page 445.)

THE Annual Meeting of the Branch was held the following morning, Wednesday, June 27th, at the Board Room of the Northampton General Infirmary, kindly lent to the Association for the purpose. Mr. H. W. Tracey, the Retiring President, occupied the chair, and there were present Messrs. Frank Hall, the President-Elect, Waite, George Cunningham, King, W. A. Rhodes (Hon. Secretary), S. A. T. Coxon, Alexander Kirby, R. P. Lennox,

R. Payling, Butler Wilkins, Sherwood, H. N. Grove, F. J. Hinds, and Godfrey.

The minutes of the last meeting having been read,

The HON. SECRETARY read the report for the year as follows:—

Mr. PRESIDENT AND GENTLEMEN,—The report which your Council have this year to make to you, is in one respect unsatisfactory, as three members have been lost to the Branch, two having resigned, and one gentleman's name being removed from the list of members for non-payment of subscriptions. On the other hand, four new members have been elected, each new member belonging to a town in which the Association was hitherto unrepresented.

Your Council had last year to regret the resignation of its Hon. Treasurer, Mr. Bridgman, who had held office since 1881, on the formation of the Eastern Counties Dental Association. Mr. H. F. White was unanimously elected to the post vacated by Mr. Bridgman.

The action of this Branch in regard to the resolution brought forward by Mr. Cunningham, advocating dental appointments to all hospitals and dispensaries in the district, called forth a vigorous correspondence in the Journal of the Association, the general tenor of which members will be familiar with.

The Hon. Secretary was recently empowered by the Council to bring prominently to the notice of all dentists, not already members of the British Dental Association (practising in this district), the constitution and objects of the British Dental Association, and to invite them to aid the work it is accomplishing by becoming members. The personal influence of members of this Branch used on every available opportunity would greatly aid in giving fullest effect to this attempt of the Council to obtain the active co-operation of all reputable dentists in the Eastern Counties.

A highly important communication received from the Hon. Sec. of the Scottish Branch will to-day be submitted for your consideration. You will be asked to support a resolution, asking the Representative Board of the British Dental Association to approach the Commission appointed in connection with the Universities (Scotland) Bill, to empower the Universities to institute a Degree in Dentistry. This communication will, no doubt, receive your most earnest attention.

The HON. SECRETARY also read the report of the Hon. Treasurer, Mr. F. H. White.

The Council recommended Colchester as the place of meeting

next year. Yarmouth was suggested, but the recommendation of the Council was adopted.

Mr. Amos Kirby, Bedford, was elected President for 1889-90.

Mr. W. A. Rhodes, on the motion of Mr. CUNNINGHAM, seconded by Mr. HALL, was unanimously re-elected Honorary Secretary.

Mr. Cunningham and Mr. R. N. Payling were re-elected, and Mr. R. W. White was elected on the Council.

A telegram was read from Mr. R. W. White, the "Reader of Retrospect," stating that circumstances over which he had no control prevented his attending the meeting.

Mr. CUNNINGHAM proposed and Mr. HALL seconded the abolition of the office of "Reader of Retrospect." An amendment was moved by Mr. COXON and seconded by the CHAIRMAN that the matter stand over. The amendment was lost.

The HON. SECRETARY read the following communication from the Hon. Secretary of the Scottish Branch:—

SCOTTISH BRANCH.

16, George Square, Edinburgh,

June 20th, 1888.

THE SECRETARY, EASTERN COUNTIES BRANCH.

DEAR SIR,—During a short discussion at the Annual Meeting of the Scottish Branch, held June 15th, on higher dental education, a suggestion was thrown out by Mr. Mackersy, our legal adviser, which was embodied in the following resolution:—

"That the Representative Board of the British Dental Association should be asked to approach, or take such steps as are open to them, to move the Commission appointed in connection with the Universities (Scotland) Bill, to empower the Universities to institute a Degree* in Dentistry."

Mr. BROWNLIE, of Glasgow, moved this resolution, and it was seconded by Mr. CAMPBELL of Dundee, and unanimously approved. I was instructed to send you a copy of the resolution, and ask you to kindly lay it before the members of your Branch at its Annual Meeting on the 27th inst., in the hope that the members would give it their consideration, and see their way to support it when brought before the Representative Board.

Although the resolution is confined to Scotch Universities, these being the only ones at present under transforming legislation, you may be sure if once a degree in dentistry was established, the English Universities would not rest until a similar privilege was conferred on them.

I am, dear Sir, yours truly,

W. BOWMAN MACLEOD, *Hon. Sec. S.B.B.D.A.*

* This is understood to mean a higher degree than the L.D.S.

Mr. CUNNINGHAM said he was perfectly sure all would do what they could to support the action of the Scottish Branch. He would formally move the resolutions the Branch desired them to pass. The only observation he would make was that it had been a matter of remark, and also a matter of regret that when there had been an agitation, such as there had been in London over a teaching university, and when matters of similar kind had come on the *tapis*, nobody had seemed to think it necessary to act. He thought it a pity such matters should be so much left to provincial men, and in matters like this, if they could force the hands of men in London they would be doing a service to all the profession. He thought no movement concerning medical education should take place now without dentists striving to have a voice in it. Recently, a similar proposition was made to the Southern Counties Branch at Southsea, the same resolutions were brought up there, and after a very short discussion they were adopted. He felt sure the Eastern Counties Branch would be following a good lead if they did the same.

Mr. WAITE seconded. Speaking of the Midland Branch first, he said that the question of dental degrees in connection with universities was very ably referred to in the President's address at the meeting of the Branch at York, a few days before. Mr. King had, therefore, the credit of bringing forward the idea, although it was brought forward some twenty years ago and abandoned. He (Mr. Waite) had the honour of being present at the meeting of the Scotch Branch where the resolutions were adopted, and the feeling there was very strong indeed. There had been for some time a movement to get a Bill through Parliament in reference to the universities of Scotland, and a Committee was appointed to look into the provisions of the Bill. He was afraid that now nothing more practical would come of their action, for the day before the papers announced that the Scotch Universities Bill had passed its third reading in the House of Commons. But that need not hinder them in the least in making a representation to the Lord Advocate, and letting the authorities know that the dentists were alive to their interests and were anxious to make them known on every available opportunity. There were none, it was true, among their friends in London who originated those things, but he was, for his part, rather proud that there were quite as good things cropping up in the provinces as in London.

The proposition was carried.

The PRESIDENT proposed a vote of thanks to the Governors of the Northampton General Infirmary for the loan of the Board room for that meeting.

Mr. CUNNINGHAM seconded. He said that in looking over the report of the Governors of the Infirmary, copies of which he had found in the room, he saw there was no dental surgeon attached to the staff. He was sorry to find that. In the year there were 1,648 dental surgery cases, and yet there was no dental surgeon. He understood some gentlemen were being trained at the Infirmary, but they could not be sufficiently trained without a dental surgeon. He was surprised that some humanitarian in Northampton had not taken the matter up, and he hoped and trusted that one result of the meeting of the Branch in Northampton would be that the Board of Governors of the Infirmary would take the matter up and appoint a dental surgeon.

The proposition was carried.

The CHAIRMAN then said it was his pleasing duty to vacate the chair in favour of Mr. Hall. He had had very little to do. He should have liked to have had more than one meeting in the year, but he knew it was very difficult in a large district like that. Perhaps when they had more members they would be able to have intermediate meetings. He lived in a very isolated place, no one else in his town, and no one nearer than Ipswich. He hoped their coming there would be an advantage to the society, the piloting of which could not be left in better hands than those of Mr. Hall.

The Chairman then left the chair, and Mr. Frank Hall, the new President, took his place amid applause.

The HON. SECRETARY proposed a vote of thanks to Mr. Tracey who had just vacated the chair. He had done everything he could to make the meeting a success, he had entertained them handsomely, and had done all in his power to make the members enjoy themselves. He hoped Mr. Tracey for very many years would be present to gladden their meetings.

The proposition was seconded by Mr. KIRBY and carried.

The PRESIDENT then read his address, as follows :—

In wishing you all heartily welcome I will avoid vain regrets that we are not in my own town of Hertford, for although I might if there be able to impart a more-at-home aspect to the few words I propose to address to you, I could not relate all the interesting facts which naturally group themselves about Northampton. It

is really extraordinary what has occurred in this town; kings and queens have been every-day objects of interest almost, while Northampton has been the meeting place of Parliament on many occasions. Here did Henry confirm the "constitutions of Clarendon"; here did the haughty Becket receive the royal rebuke of his king, and here did thriftless John Lackland bring his exchequer, and here also did he fall under the ban of Holy Mother Church, so that he and England were accursed by the Roman Pontiff. But we are not gathered together to turn over the pages of history, even when so good an excuse as Northampton is before us, so I will content myself with one more recollection, which is one strangely relevant to some remarks I shall have to make later on.

In the year of grace, 1265, Northampton was a university town. The scholars of Oxford and Cambridge were in constant ferment and waged bitter war, and so Henry the Third established a university in this town and drafted many of the youths from the banks of the Cam and Isis to settle for a short space beside those of your River Nen. It was, however, a short-lived affair. And now, gentlemen, amid so many historic recollections, have we not strong incentives to think not perhaps of British Northampton, but of the history of our profession, and since the deeds of the past are the steps which lead up to the works of to-day, to review what has been its past that we may discern what will be its future? We must not deceive ourselves; we are, as a profession, passing through a period of crisis, and it is our duty, individually, and as a Branch of the British Dental Association, to grasp firmly the facts of the case as we find them, and be prepared to grapple with difficulties and remedy abuses. It is profitless to cry peace when there is no peace, and as futile to bemoan the ills which we have not the pluck or the gumption to control. The record of the past tells us that by dint of strenuous effort, self-denial and devotion to the best interests of our calling, the pioneers of forty years ago elevated dentistry to the rank of a profession, and made it possible for a man to be proud of his vocation. What we are now is due to the manful fight and doughty deeds of these men; what we are to be will be determined by our own action, your efforts, and mine. Now, I take it, we are most of us asking ourselves whether the system of dental education is what it should be; we are poised betwixt the horns of this dilemma. Is the L.D.S., *par excellence*, the dental diploma, sufficient both as regards the professional

status it confers and the educational standard it assures, or is the L.D.S. a minimum diploma obligatory on all, but not enough for those who in the near future aspire to be in the foremost of the dental world? And if this view be accepted we are confronted by yet another question, and that is whence is the "honours" degree to come? Are we to take medical and surgical diplomas and so make ourselves duly qualified medical men practising dentistry, or are we to agitate for new powers of conferring higher diplomas?

The President of the Midland Counties Branch urged that while our students would naturally "go for" the best sounding diploma which seemed within their reach, there was a lamentable waste of time in their following the medical curriculum through its four years of arduous technical study. Mr. King asked why should not our Universities confer dental diplomas, and we may with especial fitness repeat his question in Northampton, once itself a University town. I am bound to admit, I think it improbable that a D.D.S. or D.M.D. Oxon. or Cantab. will ever grace our Register, at least if such degrees are granted upon the same terms as those which emanate from America. In the first place, what ever may be the professional qualifications of an American dental degree it offers little, if any, guarantee of general education and refinement. I know it is epidemic just now for everyone to agitate for the obtaining of a university degree, and if dentists can get one by scrambling, why let them; only, I think, we must be sure we deserve a degree before we demand it. If every Dick, Tom, and Harry becomes Dr., as in America, it will be a distinction to remain a plain "Mr." But it seems to me another way out of the difficulty exists; certain branches of science, such as chemistry, physics, metallurgy, are specially useful to dentists. Microscopy and bacteriology are again likely to be more serviceable than a knowledge of the signs and symptoms of some obscure disease of the nervous system, or the rules guiding the surgeon in amputating a foot. Now I would suggest that if our students, or the pick of them, desire higher qualifications than the L.D.S. that they should be examined in *general knowledge* and later on in those special branches of science which bear directly upon their life pursuit. I believe at present this system is applied to other departments of learning, a youth being permitted to graduate in physiology, in chemistry, or what not, and if he seek the M.B. degree, he has special studies intercalated in place of B.A. subjects, and so obtains a B.A. and M.B. degree. Something

of this kind might well be done in dentistry. But, I hear you say, why increase our burden, it is already a laborious and protracted business getting the L.D.S., and when we have got it we are compelled to be docetted with men in practice before July 22, 1878; some possibly excellent and *bonâ fide* dentists, but others certainly charlatans and in no sense skilled adepts in our art. Nor is this the only competition we have to contend against, for our morning paper tells us that the flood gates are opened and D.D.S.'s from every conceivable college in the United States are thronging to our shores and bent upon advertising us out of our patients.

As a law-abiding race we turn to our Legislature and we seek our redress, and what do we get? I am bound to confess we get very little. Members, and those who are not members of our Association, constantly clamour for prosecution of the irregular practitioners, but I hear it is an easier matter to discover a man who has done wrong in carrying on his practice by a peculiar system of advertising and other disgraceful proceedings, than to bring the offender to book. This is deplorable, and I think and hope we shall before long be able to expedite justice; at present the costs of the actions are so heavy, that we have to be careful about putting the engine of the law into operation.

Now who are the offenders; are they the registered men, or the qualified men, or are they aliens and foreigners who have no right to practise over here? An enterprising family of Jews have established a large dental emporium which they run by the aid of certain gentlemen from America, duly qualified in that country, but not upon our Register, and therefore in our view doing a most discourteous and unprofessional thing in practising over here. It makes no shadow of difference whether they do good work or bad work, they are doing what we consider wholly disgraceful; they work under the cover of a firm painfully notorious as advertisers. We welcome Americans who submit to our laws written and unwritten, but we can only censure the conduct of those who lend themselves to the catchpenny practices of firms who break every canon of dental ethics. I think, perhaps, some reasons why these gentry meet with success may be advantageously considered; of course the love of novelty which they hold out attracts many, but they certainly owe some of their attractiveness to the slow coachedness of many of ourselves. Take, for example, the reception we give to bar, crown, and bridge work, immediate root filling and other recent developments which I might instance. Whatever

may be said for or against these methods of practice, I think most of us have not qualified ourselves to sit in judgment, and the sooner we acquire the skill to execute as good bridge work or bar work as emanates from the best American workmen, the better for our patients and ourselves. There is much first-rate bridge work done, and if the public demand it, we must be able to supply the want, always supposing the work turns out satisfactory. At present we certainly are not able to deny its value; we have not tried it well enough or long enough. I think also a greater effort on our part should be made to keep fully abreast of the times, alike in manipulation and theoretical knowledge; our profession does not stand still, but a good many of us are apt to get into a rut and stick there. Again, the fullest attention to detail, not only in our management of operations, but in the whole conduct of our business is most desirable. A friend tells me that in the waiting room of a dentist he found a bare table, groggy chairs, and the walls adorned with but one ornament, and this was a badly painted picture of a grenadier guardsman having a tooth extracted by a burly looking man who seemed to believe in the *fortiter in re*, rather than *suaviter in modo*. The institution of post graduate classes in our central schools offers a valuable chance for us to freshen up our knowledge, and the same end is achieved by attendance at our Association and other meetings. It would be impossible for me, who am a man of few words, to give you anything like an idea of the strides which dentistry has taken since our last annual meeting; you either know what there has been, or you ought to know, as well as I do.

The International Medical Congress, the success of which was certainly enhanced by its brilliant section devoted to Dentistry, was shared in by one of our distinguished members, Mr. George Cunningham, who dealt with a subject he has made especially his own, I mean immediate root filling. The institution of the Irish Branch has also been the rallying point of the year, and we, no doubt, are all anticipating with pleasure a most successful annual meeting of the whole Association at Dublin. As for our home politics, I don't know that I have much to say; we remain a "select few." Our Branch is small, perhaps some of us might be glad to see its numbers increase, but for my part I remember that in union is strength, and I am quite sure that although we are not a numerous Association, we are yet so closely, so intimately united, so entirely at one in our ideas, our aspirations, that I

think we may claim that our position as a Branch of the British Dental Association should be estimated not by our numerical strength, but by the inherent force, determination, and vigour which I am sure we possess in no mean degree. One word more; every year, I think, teaches us that the provinces are now listened to, and the recommendations emanating therefrom treated with more candour and consideration than formerly. Some of the very best efforts which have been made within the past few years to extend the boons of dentistry to the Army and Navy and Public Institutions have come from men practising in the provinces. On one of these headings I feel I can speak with authority as Dental Surgeon to Christ's Hospital at Hertford. I have one fact impressed most deeply upon me, and that fact is that school boys need regular periodic over-hauling by a dentist. Presumably my boys at Hertford are more careful, more cleanly, and take more pride in the health of their teeth than would boys in a lower stratum of society, and so I say that if the Hertford lads need careful and constant watching, how much more is thus required by the waifs and strays who, like Topsy, know neither father and mother, save the parentage of red tape and the school inspector. And while speaking of my association with Christ's Hospital, I cannot refrain from expressing my great obligations to my friend Dr. Evans. He, as a skilled anæsthetist, has done so much to assist me and my little patients, boys and girls, that I cannot help adverting to the immense help a really skilled medical man can give one of us while engaged upon our operations.

When I began this address I had no idea how much I had in my heart to put forth. One more thing to say, and that I mean more than all the rest, and it is that I am heartily pleased to see you all here, and I esteem it a very great honour to have been asked to preside amongst men who are my friends and for whom I entertain a most high regard.

Mr. CUNNINGHAM then read a paper "Notes on Six Cases of Implanted Teeth," which will appear in a future number.

The PRESIDENT said the Association was very much obliged to Mr. Cunningham for his highly interesting paper. He said he should be happy to send Mr. Cunningham some teeth.

Mr. CUNNINGHAM said he preferred teeth from persons of vigorous age, say between twenty and thirty, sent in a weak solution such as two per cent. of carbolic acid, or even better, mercuric chloride (1 in 2,000).

Mr. LENNOX said Mr. Cunningham had shown him a patient with an implanted tooth, which had been implanted six months then, and he could say that it seemed to be doing excellent service. Mr. Lennox gave it a good pull and tap, and the patient said it was doing good service.

Mr. RHODES thought Mr. Cunningham was to be admired for his courage in pursuing these investigations. Mr. Rhodes had himself tried drilling into the jaw bone, and it was not so painful as one would think—he had tried it on himself. He was waiting to see how the operation succeeded, and whether the teeth were liable to absorption as in the operation of replantation.

The PRESIDENT asked whether there was any fear of inoculation.

Mr. CUNNINGHAM: He did not think there was much danger, but certainly no gentleman would send him a tooth about which there was the slightest doubt. There were plenty of healthy teeth wasted every day.

Mr. SHERWOOD: What about the occlusion of teeth?

Mr. CUNNINGHAM: The occlusion was dealt with as in artificial teeth, and constituted one of the difficulties.

Mr. COXON asked whether Mr. Cunningham really thought the thing would be a success, or was likely to be a fad. If the implanted teeth would not stand the test of two or three years, was it worth striving for? He should think with any one scorbutic, or a child that had been rickety, there would be little chance of success. Did Mr. Cunningham think the ordinary class of patient would submit to this drilling into the alveolus. Some females would submit to anything, but would the general patient? Did the periosteum unite with the bone, or how was it done?

Mr. CUNNINGHAM: It was a question which he could only answer by saying that he did not know. He wanted to know. He wanted to experiment. So far, if these cases fail to-morrow, his patients would regret it, but they would not think they had not been compensated for what they had gone through. And what constitutes success? Who does not know cases of filling, even with the best of us, failing within even one or two years; but does it mean that they were not to use filling? Certainly not. And they could fall back upon this—have the operation performed again. Absolutely there was no operation in dentistry which came near approaching this in results, in front teeth, either in appearance or work. The experiments are a great success and

are full of promise. If they could get five years or so out of it, so much the better. Some of the best cases of replantation had been those which had been done on the spot—no treatment whatever, no filling, and so on. The failures which had taken place, he believed, were chiefly due to operative work upon them, therefore he did want teeth with a living periosteum sent in a lethal solution of strong carbolic acid.

Mr. ALEXANDER KIRBY read a paper on "Impacted Wisdom Teeth, with Notes on a Case in Practice," which will appear in a future number.

The PRESIDENT said the members were much indebted to Mr. Kirby for his interesting paper. He mentioned in his experience the case of an old gentleman over seventy, he believed, who complained that his lower frame was very uncomfortable. Mr. Hall found a wisdom tooth, and had it through, but did not suggest taking it out.

Mr. KIRBY mentioned an old lady cutting a wisdom tooth at seventy-five.

Mr. BUTLER WILKINS said he had a patient who had been wearing a whole set of artificial teeth. A wisdom tooth came through when the old gentleman was about seventy-nine, and he died three years after having the tooth extracted.

Mr. RHODES mentioned the peculiar case of an old lady of seventy-three, who had a second left upper molar thrust out by the wisdom tooth, the wisdom tooth occupying the exact centre of the three roots of the second molar. The second molar had a rudimentary molar attached to its mesial surface, the only one there had ever been to do duty as a first molar.

Mr. WAITE showed Mr. Gilbert Walker's new "Granular Facing Rubber." Many favourable comments were made as to its natural appearance.

Mr. H. N. GROVE (Walsall) demonstrated upon electricity as applied to modern dentistry. He showed numerous articles, including a new electric motor, an electric mallet, an ingenious electric mouth-lamp, an incandescent lamp, an electric accumulator, which Mr. Grove said would last about a month with ordinary usage, and could be re-charged for the cost of half-a-crown, with no trouble to the dentist.

A vote of thanks was passed to Mr. Grove.

Mr. BUTLER WILKINS proposed, and Mr. KIRBY seconded, a vote of thanks to the President, which was carried.

The PRESIDENT briefly replied, and the meeting terminated.

The members then proceeded to the "George Hotel," where they were entertained at luncheon by the President, after which, on the initiative of Mr. N. Payling, the company heartily drank the President's health. The President, in acknowledging the toast, said how heartily he had enjoyed the meetings.

Afterwards all proceeded by road to Althorp, the seat of Earl Spencer, K.G. His lordship had kindly thrown open his picture gallery—one of the best in England—and his matchless library—the grandest and largest private library in Europe.

Western Counties Branch.

THE Annual Meeting of the Western Counties Branch was held at Plymouth on July 27th, 1888. The Council met at the Grand Hotel at 10 a.m.

The General Meeting of members was held in the Athenæum at 11 a.m. Mr. E. Apperly (Stroud), retiring President, in the chair. There were also present—Messrs. C. Spence Bate, F.R.S., Plymouth; F. H. Balkwill, Plymouth; J. C. Oliver, Cardiff; T. Cooke Parson, Clifton; Henry B. Mason, Exeter (Hon. Sec.); E. L. Dudley, Bath; G. B. Pearman, Torquay; F. Youngman, Torquay; J. M. Ackland, Exeter; Geo. C. McAdam, Hereford; Caleb Williams, Leamington; A. Taylor, Plymouth; E. E. Jewers, Plymouth; J. H. Gartrell, Penzance; Frank H. Briggs, Torquay; Louis E. Sexton, Plymouth; Albert Helyar, Torquay; Edward Little, Newport, Mon.; W. Fryer Cornelius, Teignmouth; Elias L. Keys, Plymouth; Alfred Smith, Clifton; Henry W. Mayne, Plymouth; Edwin Goodman, Taunton; J. Collins Tippet, Torquay; J. H. Whittell, Paignton; Henry Helyar, Haverfordwest; W. J. Goodman, Exeter; J. J. H. Sanders, Barnstaple.

The minutes of the last meeting were read and confirmed.

The HONORARY SECRETARY (Mr. Henry Mason) stated that letters had been received from a number of gentlemen unable to be present.

He also reported that the Council that morning had elected two new members, both of the Association and the Branch: Mr. Charles Smith (Bath), and Mr. E. Little (Newport, Mon.); he had also received papers from Mr. Alfred Helyar (Torquay), for election to the Branch.

Mr. Helyar was declared elected.

He then read the Annual Report, as follows :—

The Council have pleasure in presenting their Report to the the Annual Meeting of members. Last year's meeting at Stroud was a most successful one, a result due in no small degree to the President, Mr. E. Apperly, whose address was followed by papers from Dr. Waite, Mr. T. Charters White, Mr. McAdam, Mr. C. A. Hayman and Mr. Spence Bate, and by demonstrations given by Mr. Cooke Parson, Mr. Browne-Mason and Mr. Balkwill.

The Council have been compelled, owing to the refusal of Mr. Rogers Bate to act as President-elect, to alter the arrangements for this year's Annual Meeting. They have elected Mr. F. H. Balkwill to the vacant post, and are much indebted to him for undertaking the duties at so short a notice. They feel sure the nomination will be warmly approved of by the members generally. The alteration in the place of meeting from Tiverton to Plymouth followed as a consequence of the change of President.

The financial condition of the Branch is satisfactory, although the accounts do not show a large balance in hand as on some previous occasions, owing to the donation of £10 10s. given last year to the Dental Benevolent Fund.

The April Meeting of the Council was largely occupied with the changes consequent on Mr. Bate's retirement. Several other matters were however considered, though they do not call for notice here.

The Council regret to say that the Branch has lost two members by death during the past year: Mr. Marks, of Newton Abbot, and Mr. Beavis, of Newport; one member also has resigned on leaving the neighbourhood, a total loss of three. Three new members were elected in April, and three to-day, so that the number on the list is now 79 against 76 last year.

The Council propose that the area of the Branch be extended by including the counties of Monmouth and Glamorgan, and should this meet with the approval of the members, they suggest the holding of the annual meeting for 1889 at Cardiff, and they nominate Mr. J. C. Oliver of that place as President-elect.

The Council have adopted a new form for the election to fill the usual vacancies in their number. They hope members who do not approve of the names submitted will not hesitate to substitute those of other members, who in their opinion are better qualified.

In the absence of Mr. Browne-Mason, the Secretary also read the treasurer's report.

Treasurer's Balance Sheet, 1887-8.

RECEIPTS.			EXPENDITURE.		
1887	£	s. d.	Aug., 1887	£	s. d.
To Balance in hand ...	13	3 0	By Donation to Dental		
„ Subscriptions ...	17	15 0	Benevolent Fund	10	10 0
„ Arrears paid ...	0	15 0	1888		
„ Balance due to Treasurer ...	0	0 3	„ Paid Expenses of		
			Stroud Meeting		
			as per account ...	13	1 0
			April 14		
			„ Council Room at		
			Plymouth ...	0	10 6
			„ Townsend Printing		
			and Stationery ...	5	18 6
			„ Hon. Sec.'s Stamps	1	3 1
			„ Treasurer's ditto ...	0	10 5
	<u>£31</u>	<u>13 6</u>		<u>£31</u>	<u>13 6</u>

The HON. SECRETARY added:—The reason why we have a balance on the wrong side is that there are two years' printing in this account. Otherwise the balance would have been on the right side.

Mr. SPENCE BATE proposed that the report be received and adopted, subject to the auditing of the accounts.

This was seconded by Mr. McADAM, and carried.

On the motion of Mr. SPENCE BATE, Mr. Smith and Mr. McAdam were appointed to audit the treasurer's accounts.

Messrs. J. M. Ackland (Exeter), T. Cooke Parson (Clifton), and Caleb Williams (Leamington), were elected Members of Council, in the place of Messrs. F. H. Balkwill, Martin Magor and E. N. Washbourn.

The RETIRING PRESIDENT then delivered a valedictory address.

GENTLEMEN,—The time has now come for me to vacate this chair, and to pass on to another the position which you were pleased to confer upon me twelve months ago. I am very conscious that I have, during the year, come far short of my ideal in the discharge of the duties of President of this Association, but the kindness accorded to me when we met at Stroud has been continued throughout my term of office, and will not, I know, be wanting at its close. None need more than I do that you should be—

To my virtues very kind,
And to my faults a little blind.

In the many engagements of a practice requiring (as you are all aware) constant personal attention, it has not always been easy to find time for much outside work, but no press of business has prevented me from feeling, and, as far as possible evincing, a deep interest in the welfare of this our Western Branch of the British Dental Association. The year just closing has not, perhaps, been so eventful as some of its predecessors; quietly and swiftly it has moved along the even tenor of its way, but if we have learned in it further to perfect our modes of operation, and more fully to realise the obligations of our profession, we can afford to let it pass away without regret.

I see in looking through some of the reports of the different branches, that in many directions the ordinary meetings are being supplemented by extra ones, a plan which in my opinion is worthy of consideration by ourselves. Anything which may serve to increase the spirit of cordiality and interest in the Association, which keeps alive the zeal of our younger members, and places us in touch with all that is freshest and best in the science of dental surgery, is surely not to be lightly esteemed. Some new members have been added to us during the year, and our Branch may claim to be in a satisfactory condition, but still more favourable results may be tabulated if more frequent meetings can be held, with helpful suggestions, and practical demonstrations given. I have no wish as retiring president to occupy more of your time, and it only remains that I should express, both on your behalf and for myself, our warm thanks to our excellent *Treasurer* and *Secretary* for the kindness and ability with which they continue to conduct the business of our Branch, and to them and many others my personal gratitude is due for advice and assistance generously given, enabling a naturally timid man to survive the ordeal of his year of office and to reach its ending with most pleasant remembrances of much kindness received. And especially gratifying is it that I now make way for one so worthily esteemed among us as our friend Mr. Balkwill, to whom I wish all happiness and success during his year of office.

THE PRESIDENT-ELECT (Mr. F. H. Balkwill) having taken the chair,

Mr. T. COOKE PARSON proposed, and Mr. CALEB WILLIAMS seconded, "That the best thanks of the meeting be given to Mr. Apperly for his services as President."

Carried unanimously.

The RETIRING PRESIDENT returned thanks.

(*To be continued.*)

The Benevolent Fund.

THE following new Subscriptions and Donations to the Benevolent Fund of the British Dental Association have been received by the Treasurer since April 1st, 1888.

Subscriptions.

Balcomb, Thomas, Pembroke House, St. Mark's, Jersey, (increased from 10s. 6d.)... ..	£1 1 0
Baldwin, Harry, 37, Cavendish Square, W.	1 1 0
Hughes, Morgan, 4, Wellesley Villas, Croydon	1 1 0
McCall, John H., 13, Belvoir Street, Leicester	1 1 0
Nicol, W. Henderson, 2, Clarendon Road, Leeds (increased from 10s. 6d.)	1 1 0
Wallis, George, 54, Wimpole Street, Cavendish Square, W.	2 2 0
Williams, E. Lloyd, 2, James Street, Buckingham Gate, S.W. (increased from 10s. 6d.)	1 1 0
Woodhouse, A. E. Clayton, 1, Hanover Square, W. ...	1 1 0

Donations.

Brunton, George, Hillary Mount, Leeds (in addition to Subscription)	£1 1 0
Midland Counties Branch of the British Dental Association (Collected at Dinner at York, May 18th) ...	10 3 0
Smith, Dr. John, 11, Wemyss Place, Edinburgh (in addition to Subscription)	2 2 0
Southern Counties Branch of the British Dental Association	5 5 0

ORIGINAL COMMUNICATIONS.

Some Surgical Conditions in Connection with Dentistry.*

BY PAUL SWAIN, F.R.C.S.,

SURGEON TO THE SOUTH DEVON AND EAST CORNWALL HOSPITAL.

GENTLEMEN,—Before proceeding to the immediate subject of this address you will permit me to remark that it is a matter of considerable congratulation that the relative position of the dental and medical professions enables a member of the latter to take

* Read at the Annual Meeting of the Western Counties Branch of the British Dental Association, held at Plymouth, July, 1888.

part in proceedings such as to-day. The science of dentistry and the practice of surgery overlap one another, and it cannot but be to our mutual advantage for the art of surgery to be represented, however feebly, at your deliberations.

In undertaking to address you I have thought it advisable shortly to touch on some few topics of interest to both professions, rather than devote the time at my disposal to one subject which might prove a well-worn one, or of little moment to the majority of your members. First, then, let me allude to the extraction of deciduous teeth. It is a question which constantly arises between medical men and their patients. And I have gathered that there is a strong popular prejudice against the removal of deciduous teeth, on the ground that there follows a contraction of the jaws which exercises a prejudicial influence on the permanent teeth from overcrowding. I am not aware what is the generally received opinion on this point amongst dental surgeons, but for myself, I may state, subject to your correction, that like many other popular ideas, this one, as to the contraction of the jaws after the removal of deciduous teeth, is a delusion. It is an anatomical fact that the alveolar processes develop quite independently of the teeth. The additional room required for the increased number of permanent teeth is provided for by an increase in the length of the jaw which takes place *behind* the position of the deciduous teeth. In proof of this, the sacs of the permanent molars are found in the tuberosities of the upper jaws and the coronoid processes of the lower jaws, but as the jaws elongate and straighten out they assume their proper position. It stands, then, to reason that the removal of a carious deciduous tooth can have no effect on the after development of the jaw. And it is probable that a correct appreciation of this fact may save many an unfortunate child from nights and days of agony, and confer peace of mind, to say nothing of rest of body, on many an anxious parent.

I am almost ashamed to call your attention to my next subject. It is the many forms of deranged conditions of health resulting from imperfect mastication owing to absence of proper and efficient grinding teeth. Can anything be more trite, at any rate, to the dental mind? And yet the experience of my consulting room impresses on me the fact that in my own profession what seems so palpable is constantly overlooked.

It is needless for me to describe to you the confirmed dyspeptic to whom life is a burden, and who is in turn a burden to his

friends. To him work has no pleasure, and pleasures have no joy. He has run the gauntlet of physicians without number. He has consumed bismuth by the pound, and drank the mineral acids to excess. He has been dieted until the horse who was brought down by his frugal master to one straw per diem, is hardly in it with him. And still his imperial stomach dominates him ruthlessly. He is so prepared by long experience to show you his poor coated tongue that when you ask him to open his mouth, he immediately protrudes that organ. When you have arranged that matter and examine the cavity of his mouth you find the cause of all his troubles. Probably the lower molars on one side are gone, and the upper molars on the other, or else are useless for mastication. He is not like an aged gentleman I know, who still retains his mental and physical vigour, and is an absolutely bad bargain for the profession, and who boasts that he has but one tooth left in his head, but with that one he can crack a nut. And here let me remark that the man with no teeth at all is far better off than a man with a tooth here and a tooth there. His gums harden and become like the mandibles of a turtle. He has lost absolutely his grinding power, and with it the first and essential physiological process of nutrition. You will bear me out that I am in this description not drawing on my imagination. I can safely say that hardly a week elapses that I do not meet with cases more or less such as I have just sketched. My difficulty is not in deciding as to what advice to give, but to get these unfortunates to follow it. They have become so accustomed to be auscultated, to be percussed, to be palpated, and to be physicked, that the simple dictum "go and get some artificial teeth" is to them what "go and wash in Jordan seven times" was to the Assyrian of old. They go away in a rage.

By a natural sequence I next beg to call your attention to one at least of the drawbacks to artificial teeth, namely, the facility with which they are sometimes swallowed, or sucked into the air passages. The most striking instance of this latter kind is recorded by Dr. Gross, Professor of Surgery to the Medical College of Philadelphia. Here four artificial incisor teeth connected together by metal were sucked into the windpipe, and after a lapse of thirteen years were found in the right thoracic cavity, into which they had passed by ulceration.

There are on record a number of cases in which artificial teeth have been swallowed. They go down in good company, for

amongst the various digestible articles introduced into the stomach I find recorded nails, knives, spoons, forks, a door key—which was restored to its owner after four days—a horse shoe, a brace buckle, dominoes, a rosary with seven medals attached (evidently taken by some good Protestant who wished to put down papistry), one pint of fruit stones, which were removed after death, and which were heard to rattle during life, thus proving that truth is sometimes stranger even than the fiction of Dickens.

There is a curious case recorded in the *Lancet* of January 7th, 1882, by my friend, Dr. Easton. "On May 6th, 1871, he was called to a young man, who during the previous night had swallowed three artificial teeth attached to a gold plate. He prescribed for him, and on May 8th, after an enema, the teeth were expelled into the night stool." Dr. Easton continues:—"My patient, after cleansing the teeth, returned them to his mouth, and went out to supper." This was remarkable; as Shakespeare hath it, "and then to breakfast with what appetite you have." But Dr. Easton goes on, "now comes *the* remarkable part of the case. On the 24th of May, 1880, I was again called to see him, and found that during a violent epileptic fit he had once more swallowed the *same* plate and teeth. Nothing was seen of the teeth until the 25th of June, when he passed them with a motion without pain." Dr. Easton does not tell us whether he again promptly utilised his recovered property.

Another case of great practical bearing is reported in the same vol. of the *Lancet*. A gentleman was found drowned from a bathing machine on Southsea beach. On examination, it was found that his artificial teeth had become displaced and blocked his windpipe. It was thought that in the act of diving he had taken a deep inspiration, and that thus his artificial teeth were sucked into his open glottis. Last June I saw a young lady, æt. twenty-two; three months previously, during her sleep, she suddenly awoke and found a front artificial tooth at the back of her throat. According to her description the tooth was fixed in a vulcanite plate, which fitted the whole front of the mouth, and was fixed by gold hooks to the right bicuspid on one side and the left incisor on the other. Before she could recover herself she had swallowed the tooth and its attachment. She immediately saw a medical man, who could discover no signs of the missing tooth. Since then she had felt great pain in the upper part of the back, and during the act of swallowing. I passed a horsehair probang and

found considerable resistance to its passage into the stomach into which it entered with a jerk. I failed, however, to produce the tooth. I presume that up to this time it has not been passed per rectum, or I should have heard of the event. Looking to the evident obstruction at the junction of the œsophagus with the stomach, together with the existing pain, it is quite probable that the foreign body may be impacted at that spot.

In 1885 Professor Bilroth, of Vienna, removed a set of artificial teeth from the œsophagus by œsophagotomy, and shortly after he opened the stomach of a girl of seventeen and removed a set of teeth which she had swallowed during her sleep. Both cases recovered. It is hardly necessary to remark that in nearly all the cases recorded of this accident, the teeth have been swallowed during sleep. The reiteration of the fact may cause us all to be more emphatic in our directions to patients, never to sleep with artificial teeth in their mouths. One other precaution it is also needful to enforce, and that is to insist on the removal of artificial teeth before the administration of an anæsthetic.

I will now make a very brief reference to the accidental surgery of the jaws. I believe it to be a golden rule in all such surgery to be strictly conservative. However extensive may be the injury either to the soft or bony structures, we must remember that there is no part of the body where the reparative process is so rapid, and no portion of bone or any tooth should, if possible, be sacrificed. There is an exception to this latter rule, where teeth are loosened in the immediate neighbourhood of a fracture of the lower jaw, when, I think, it is better practice to remove them, as they are apt to slip between the fractured ends of the bone. In severe fractures of the lower jaw, especially when compound, I cannot praise too highly Hammond's wire inter-dental splint, which I have been permitted to figure in "Surgical Emergencies." It is seldom that injuries to the upper jaw require much treatment. But one case which some time ago I was called into the country to see was of such an interesting character that I will relate it. A gentleman rode his horse at a hedge. His horse made a mistake, and rider and horse fell on the other side. When I saw the gentleman, some hours after, I found that all the incisors of the upper jaw had disappeared, and that, in consequence, the two maxillæ had fallen together, the keystone of the arch being gone. I put him under chloroform and made a careful examination of the injury, and in doing so I observed something white appearing

up one of the nostrils and struck it with a probe. To make a long story short, I found that the four incisors with the entire alveolus had been forced up into the cavity of the nose. I was able with little trouble to pull them down into place, and wiring them to the contiguous teeth they remained in admirable position, and the gentleman made an uninterrupted recovery without the slightest trace remaining of his severe injury.

I am never present at dental operations without admiring the dexterity and rapidity with which they are generally performed. The confined space in which you have to work and the difficulty of getting rid of the blood are serious handicaps to oral operations. There are one or two points I would mention, more by way of suggestion than criticism. First, with regard to the use of the gag. The boxwood gag has always appeared to me a most inconvenient instrument. It is placed in a central position, obstructing light and interfering with manipulations, and is, moreover, so easily slipped out of place. Its insertion, before the administration of the anæsthetic, is inconvenient, and sometimes alarming to the patient, and I have heard it remarked that sickness more frequently follows when this form of gag is used. I cannot confirm this from my own experience. I am glad to see many dentists are now using Mason's gag, or some modification of it, which certainly does away with all the objections I have urged against the boxwood gag. One other remark with regard to the method of freeing the mouth from blood. I believe for this purpose there is nothing like small compact sponges wrung out perfectly dry from water. A small sponge fixed on a sponge holder, such as the one I show, will enable the operator to clear the mouth from blood and, what is also of great consequence, to sponge thoroughly the pharynx during the administration of an anæsthetic. A better form of sponge holder, which I have recently adopted, is the one I show you, which enables the operator to pick up and release his own sponges. I find in all operations about the jaws, in which I need not tell you the bleeding is sometimes terrific, that fine cupped sponge firmly rammed into the bleeding cavity is most effective, and I can quite conceive that in extensive dental operations, where, for instance, many teeth have to be removed from both the upper and lower jaws, some such device might be found useful to the dental surgeon.

LEGAL INTELLIGENCE.

Smith v. Partridge.

POLICE COURT, WESTMINSTER, 10th August, 1888. Before
L. C. T. D'EYNCOURT, Esq., Magistrate.

Mr. R. E. MELSHEIMER : Sir, in this case I appear for the plaintiff. The defendant appears by counsel. I am instructed by Messrs. Bowman and Crawley-Boevey on behalf of the British Dental Association for the prosecution. The defendant, Mr. Partridge, is the proprietor or inventor, or whatever it may be called, of the South Kensington Ladies' Dental Institution, in Sussex Place—I believe a well-known institution—where he has been carrying on his business for some time as a sort of Dentists' company for the treatment of lady patients. The charge against Mr. Partridge now is that he has used the title "Licentiate of Dental Surgery" without being registered under the Dentists Act. The offence is under the 3rd section of the Dentists Act, 1878, the 41 and 42 Vict., ch. 33—"A person shall not be entitled to take or use the name or title of dentist (either alone or in combination with any other word or words) or of Dental Practitioner, or any name, title, addition, or description implying that he is registered under this Act, or that he is a person specially qualified to practise dentistry unless he is registered under this Act." I do not know that there can be any doubt that those words cover the use of an abbreviated title. "Licentiate of Dental Surgery" is expressed by the letters "L.D.S." I do not know that I need refer to it, because it will not be a subject of any dispute between us ; but there is a clause in the subsequent Act which extends the application of that section to the use of any title by means of letters. The letters "L.D.S." are the abbreviation for "Licentiate of Dental Surgery." I do not think anything turns upon it ; but I think I ought to mention it. That is the offence charged.

I propose, sir, to give you briefly the history of this case. I will cite a case in the Supreme Court in which this defendant, Mr. Partridge, obtained a decision in his favour. The report of that case gives a history of the case, and explains the object of the prosecution. It was tried in the High Court, and went to the Court of Appeal. Mr. Partridge was successful in both cases. The decision in that case I will refer to, because it may be urged that it affects this case. My contention is that it does not, and I will shortly state why. Mr. Partridge was originally a duly qualified registered dentist. He did, in fact, obtain his title of "Licentiate of Dental Surgery" in Dublin ; but the Dublin Council, for reasons which I need not go into to-day, saw fit to remove his name from the List of Licentiates. They cancelled his diploma ; and, thereupon, the General Medical Council, who have the custody of this Dental Register, struck his name off the

Register, as he had ceased to hold the diploma in respect of which alone he was registered. They thought they were bound to strike him off the Register. The Court held that the Medical Council were wrong, and that the whole of the proceedings with reference to this registry being dependent solely upon the Dentists Act, the Medical Council were bound to act strictly and conform to the provisions of the Act, and that they had no right to remove the name of Mr. Partridge simply because the Dublin Council had struck his name off their List. Accordingly, they ordered the Medical Council to restore his name to that List. That decision was affirmed by the Court of Appeal. The case is reported in 19 Chancery Division at page 467. This same gentleman was the defendant there. It is the case of *Ex parte Partridge*. I will read a part of Lord Esher's judgment. He says "In this case the applicant for the Mandamus was in 1878 a Licentiate in Dental Surgery of the Royal College of Surgeons in Dublin, and in respect of that qualification he was put on the Register, established by the 41 and 42 Vict., ch. 33. Since then, in consequence of a breach by him of the undertaking he entered into with the authority by whom he was licensed, such authority revoked his licence. For that reason, and for that alone, the General Medical Council have erased his name from the Register. They have not exercised, or affected to exercise any jurisdiction under sections 13 and 15 of the Act, but, as a mere consequence of the fact that he is no longer a Licentiate of the Royal College of Surgeons in Ireland, they have treated him as no longer entitled to be on the Register." I need not read any further part of the judgment. The Court held that the General Medical Council were wrong, because they had not acted under this Act. The section referred to is that the General Medical Council have power to remove the name of any person on the Register after making inquiries, and satisfying themselves upon those inquiries that he has been guilty of disgraceful conduct.

Mr. GEORGE ELLIOTT: I would ask my friend to explain to you, sir, what has been the conduct of this gentleman, because the way in which the word "disgraceful" is used may be misunderstood.

Mr. R. E. MELSHEIMER: In point of fact—and my friend has no objection to my saying this—what is considered as disgraceful conduct in this case is that Mr. Partridge has advertised in a way which no dentist would think consistent with the dignity of the profession. If my friend wishes me to do so, I will read a part of the advertisements; but they are, in the opinion of the General Medical Council, evidence of disgraceful conduct, from a professional point of view. They think it is disgraceful conduct for him, as a dentist, to advertise in the way he does. The advertisements are rather long—

The MAGISTRATE: You mean that they tend to lower the profession?

Mr. R. E. MELSHEIMER: Yes, sir.

The MAGISTRATE : The case you refer to was decided in his favor ?

Mr. R. E. MELSHEIMER : Yes, sir. Thereupon the Council have proceeded under the provisions of the Act, and have held an enquiry, and have upon that enquiry, and as a result of it, come to the conclusion that they ought to strike the name of Mr. Partridge off the Register, and they have in conformity with the provisions of the Act done so, and his name is now removed from the Register of Dentists on the ground that the General Medical Council, acting under the provisions of this Act, by inquiry have satisfied themselves that his conduct has been most disgraceful conduct against the profession.

The MAGISTRATE : As far as I am concerned, that I suppose cannot be called in question ?

Mr. R. E. MELSHEIMER : Quite so, sir. I only referred to that because I thought that perhaps the case might be urged against me as an excuse for using the name. It was an excuse ; but it is now no longer so. The Act says he must not use the title unless he is registered. The only possible answers to a charge of this kind are—first, that he is in fact on the Register, this copy is *prima facie* evidence that he is that he is not. Of course, if he was on the Register, the Register could be produced and would show it. That is one defence. The other will be that he has not in fact used the title. If he has used the title, and his name is not on the Register, the offence is complete, and you have no power to enter into qualifications or otherwise.

Sir, I have stated these facts in order that you might know what sort of case this is. Mr. Partridge is a man who has every knowledge of what is required. He is not like an ignorant practitioner who might resort to this means for the purpose of earning his living, and to trap the unwary. It is not like the case that we sometimes hear of. This gentleman has been removed from the Register. He has contested that in the Law Courts with success. His name is now taken off the Register again, and I should have thought he would have abandoned these titles which he is not entitled to use. I have given you these facts, sir, in order that you might know how to deal with this case when it is proved.

The MAGISTRATE : As to the willingness to abandon the title ?

Mr. R. E. MELSHEIMER : I should think that would hardly be sufficient, sir, because he has had notice of the illegality of his conduct, and he has gone on. He has sent these circulars to the Dental Association, as much as to say, "I am claiming that I am entitled to use this title," and judging from his letters, his view of the law is, that as he was once qualified he is always qualified.

The MAGISTRATE : Have those letters been used by him since the General Medical Council struck his name off ?

Mr. R. E. MELSHEIMER : Yes, sir, continuously. However, I think he wishes to meet the case fairly. He says he is entitled to do this notwithstanding the law. He says that the law is wrong, whatever it may be.

Mr. G. ELLIOTT : I will make this offer to my learned friend—that if you will dismiss the charge altogether I will undertake in the future not to use the title at all.

Mr. R. E. MELSHEIMER : I can hardly say that I should be satisfied with that.

Mr. G. ELLIOTT : At the same time, sir, I am perfectly satisfied that when you have heard the whole of the case, you will be of opinion that although there has been a technical breach of the law, there is no real case for your interference.

Mr. R. E. MELSHEIMER : Of course, the inevitable result of this prosecution must be that Mr. Partridge must discontinue the use of the title. Therefore, I can hardly say I should be satisfied with my friend's offer. In the exercise of my duty towards the Association who are prosecuting, I had better prove the case and then leave it entirely in your hands, and you will deal with it. Of course, the one result must be, that Mr. Partridge will cease to use the title. I put in a copy of the Register, sir, which under the section of the Act, is made *prima facie* evidence. The name of Mr. Partridge is not upon that.

The MAGISTRATE : This is the last Register.

Mr. R. E. MELSHEIMER : Yes, sir. This is the current copy.

The MAGISTRATE : Is the Register published annually ?

Mr. R. E. MELSHEIMER : Yes, sir, this is, by the Act, made *prima facie* evidence. Then, if my friend disputes the accuracy of that copy, it is open to him to *subpoena* the Registrar, to show if the name is on the Register or not. There is only one original copy of the Register, and that is made *prima facie* evidence, upon which you would, in, the absence of rebutting evidence, act.

Mr. G. ELLIOTT : I quite understand that, under the Act, to have a proper copy produced would be sufficient. Though I do not throw out any suggestion that my friend does not produce a proper copy, I think we ought to have a proper copy produced ; otherwise he might produce a copy of any unauthorised register.

The MAGISTRATE : Section II., towards the end, says " The General Council shall cause a correct copy of the Dentists' Register to be, from time to time, and at least once a year, printed under their direction, and published and sold, which copy shall be admissible in evidence."

Mr. G. ELLIOTT : If you are satisfied, sir, that that is a proper copy I will say no more upon that point.

Mr. R. E. MELSHEIMER : Such a copy is always admitted in such a case as this. I now propose, with your permission, sir, to examine Mr. Ash.

The MAGISTRATE : Yes.

Mr. WILLIAM ASH, sworn, examined by Mr. R. E. Melsheimer.

Q. Is your residence at No. 60, Harold Street, Camberwell ?

A. It is.

Q. Are you dentist assistant to the defendant, Mr. Partridge?

A. I am.

Q. Have you been there some years?

A. Yes.

Q. At his place, No. 43, Sussex Place?

A. Yes.

Q. Does he generally attend there daily?

A. Not every day.

Q. How often?

A. Occasionally.

Q. How often, would you say, in the course of the week?

A. He comes in occasionally; sometimes late in the day, sometimes early, and sometimes he is away for a time.

Q. At any rate, he comes there every week?

A. Yes.

Q. Except when he is on his holiday, does he attend there frequently?

A. He is there frequently.

Q. Does he take part in consultations with patients?

A. Occasionally.

Q. Are there door-plates outside the premises?

A. There are.

Q. Will you look at this paper? [Handing document to the witness.] You see that top copy of the door-plate. Is that a copy of the words that are upon it, as far as you can remember?

A. Yes, as far as I remember.

Q. "Mr. Partridge, L.D.S.," and so on?

A. Yes.

Q. Are the other door-plates copied there also stuck up in various places outside the house?

A. I believe so, as near as I can remember.

Q. At any rate, the words "L.D.S." appear upon them?

A. Yes. "Mr. Partridge, L.D.S., Surgeon-Dentist, Royal College of Surgeons."

Mr. RICHARDSON (The Clerk): The paper is this:—"One plate on railings, 'Mr. Partridge, L.D.S., Surgeon-Dentist, Royal College of Surgeons.' Two plates right side of door; top one, 'The Ladies' Dental Association;' the other one, 'South Kensington Dental Institute, H. F. Partridge, L.D.S., Royal College of Surgeons, Consulting Dental Surgeon.' Over gateway, in scroll, 'Ladies' Dental Institution.'"

The MAGISTRATE: Written out on the plates?

A. On the plates.

Mr. R. E. MELSHEIMER: It is the first and the last of those which are the subject of the present charge. Those contain the words "L.D.S." Of course, "Dental Institution" is not any substantive part of this charge.

Q. Have these plates been there any length of time ?

A. For some time—for more than a year. I fancy so—I am not quite sure.

Mr. R. E. MELSHEIMER : Sir, it was formerly necessary to prove the assent of the General Medical Council, under the last paragraph of the 4th section. That is no longer necessary, in virtue of the provisions of the recent Medical Act of 1886, the 49th and 50th Vic., c. 48, section 26, under which there is repealed so much of section 4 of the former Act as provides that the prosecution shall not be instituted by a private person except with the consent of the General Medical Council. Sub-section 2 of section 4 is this :—"A prosecution for such offence shall be instituted only as hereinafter mentioned."

The MAGISTRATE : That relieves you from the necessity of complying with section 4 ?

Mr. R. E. MELSHEIMER : Yes, that was formerly rather a burden in these prosecutions—to get the consent of the General Medical Council. Sir, if this witness is not cross-examined, that will be my case.

Mr. G. ELLIOTT : Sir, I am instructed to appear on behalf of Mr. Partridge. Of course, I shall not, for one moment, contend that a technical violation of the Act has not been committed in this case, but I submit to you that there is no ground whatever for this charge. The Council have removed the name of Mr. Partridge from the Register, and it would be idle for me to contend that his name is upon the Register. Of course, whether it will be so in future or not is another matter, but upon this charge I have to address you in reference to the facts of the case themselves. Mr. Partridge, in 1870, had been in practice as a *bond fide* dentist for some eleven years, and therefore was clearly entitled, for that reason alone, to be placed upon the Register, under the Dentists Act, 1878.

Mr. R. E. MELSHEIMER : I have not read to you, sir, all the cases that I cited, but it was pointed out that the only qualification in respect of which he was registered was the possession of that diploma. Had he been registered in respect of anything else, it is possible that might have been used in order to vary the decision.

Mr. GEORGE ELLIOTT : My friend will not dispute the facts. Mr. Partridge had really a double qualification had he chosen to be placed upon the Register as a *bond fide* practitioner ; but, as I say, having this diploma of the Royal College of Surgeons in Ireland, he preferred to be placed upon the Register in respect of his qualification as a licentiate of that College. One of the terms upon which that diploma is granted is, that a person who is a licentiate shall not advertise. Mr. Partridge practised in this country under that diploma, and for a considerable period of time he did not advertise ; but, unfortunately, he became blind, and therefore he was obliged to call in the assistance of other persons. Then he formed the Association which my friend has referred to—the South Kensington Ladies' Dental Institution. Mr.

Partridge formed that institution under the highest patronage. I will hand you up a paper, from which you will see that there are names which command universal respect. Immediately this Association became a success, a whole host of competitors followed. I have the pamphlets of some of them here. My friend will not dispute these facts, I am sure. In consequence of those imitators, Mr. Partridge felt himself compelled to say that he was the original founder of the South Kensington Ladies' Dental Institution, in order that he might not be confounded with these institutions which had been started. So soon as those advertisements came to the knowledge of the Royal College of Surgeons of Ireland, they at once considered it a breach of the rules, and proceeded to remove the name of Mr. Partridge from their books; but had Mr. Partridge retained his qualification by being registered, not in respect of his being a licentiate of the Royal College of Surgeons in Ireland, but merely as having been in *bonâ fide* practice for eleven years, the mere fact of his having advertised would never have been brought to the knowledge of the General Medical Council. It was only because he had placed his name on the Register of the Royal College of Surgeons in Ireland that it came to the knowledge of the General Medical Council that he had advertised, and they erased his name. He applied for a Mandamus to restore his name. The case went before the Divisional Court, and the Court of Appeal. They decided in his favour, and his name was restored. In giving judgment in the Court of Appeal, Lord Esher dropped the remark that although they decided in favour of Mr. Partridge upon the point which was before the Court, yet the Council could have proceeded against him if they chose under another section of the Act, the section to which my friend has referred with regard to disgraceful conduct. His Lordship thought that if they could prove that he had been guilty of disgraceful conduct they could erase his name. You have the report before you, sir, and you will see what Lord Esher says. I do not wish to say a word against the General Medical Council, but probably they were not too well disposed to Mr. Partridge under all the circumstances of the case, because he had obtained a decision in the Court of Appeal in his favour. In consequence of the decision that had been given in the Court of Appeal, they held a meeting, and at that meeting they came to the conclusion that these advertisements of Mr. Partridge's were disgraceful conduct, and on that fact they erased his name from the Register. Now they have brought these proceedings. Mr. Partridge may take what proceedings he may think fit, to see whether they have erased his name under proper circumstances, but what he asks me to state here to-day is this : that this Act was passed to prevent persons who are not properly qualified from deceiving the public. My friend will not contend that Mr. Partridge is not perfectly competent and properly qualified. The Act was passed with the object of preventing persons not competent or properly qualified from prac-

tising and so deceiving the public by reason of the title "L.D.S." But that is not the case here. Mr. Partridge is a properly qualified and competent man, and he is not deceiving the public in any way by using the term "L.D.S." The mere fact that his name has been erased from the books does not render him any the less competent and qualified. As far as the Act is concerned, I say this is not one of those cases which the Act was intended to meet. If Mr. Partridge does not contest the decision of the General Medical Council in a Court of Law, he will no longer go on using this title. At the same time he feels that he is entitled to go on using it; and he will, if so advised, take proceedings in the belief that he will be held to be right. He is in this difficulty: that the General Medical Council having erased his name from the Register on a technical matter, he cannot come and prove that his name is on the Register. You will agree with me, sir, that this is not a case in which any penalty of an extreme character should be enforced. Mr. Partridge has simply acted in defence of his rights. That is really all I have to say.

Mr. R. E. MELSHEIMER: I have allowed my friend to state facts which he is not prepared to prove. I should like to state this as to the action of the General Medical Council. I will not go into a long reply. My friend seems to think this has no reference to the Licentiate-ship. Their action in striking Mr. Partridge off the Register is founded solely on what they considered disgraceful conduct in a professional respect. It is not with reference to the "L.D.S." title which is in dispute. *Non constat* he would not be treated in the same way exactly if he had been registered with any other qualification.

THE MAGISTRATE: What Mr. Elliott has mentioned is true, that the ground on which Mr. Partridge has been struck off does not include any want of proper qualification on his part. His qualification remains as before.

Mr. R. E. MELSHEIMER: Exactly.

The MAGISTRATE: I thought he was struck off simply because he advertised.

Mr. R. E. MELSHEIMER: Yes, but if he presented himself now I am sorry to say, for his sake, he would not be capable of getting on the List again as a qualified practitioner, because he is blind. He could not get on the List again. He could only use this title for the purpose of advertising.

Mr. G. ELLIOTT: I think my friend understands the point I put before you, sir, and upon which I proceed, namely, that no action of the General Medical Council, either for or against Mr. Partridge, really affects his capacity. The mere fact that they, rightly or wrongly, remove "L.D.S." does not prevent his pursuing his profession with exactly the same skill as before.

Mr. R. E. MELSHEIMER: As I think I said to the learned Magistrate in opening the case, that question does not arise to-day. This is only in reference to the amount of the penalty.

The MAGISTRATE : The penalty will be £5.

Mr. R. E. MELSHEIMER : I ask for costs, sir. I ask for costs more to express your disapproval of the course pursued than otherwise. The costs do not amount to much. There will a penalty of £5 with costs.

The MAGISTRATE : What costs do you ask for ?

Mr. R. E. MELSHEIMER : As much as you can give, sir.

Mr. G. ELLIOTT : I ask you to give the lowest possible costs, sir.

Mr. R. E. MELSHEIMER : As I have said, this is not a case against a poor man who cannot afford to pay. It is the case of a man who is asserting legal rights, and he can well afford to pay the costs.

The MAGISTRATE ; There are two summonses.

Mr. G. ELLIOTT : I presume there will be only one penalty and one set of costs.

Mr. R. E. MELSHEIMER : There will be one penalty and one set of costs, and a conviction on both summonses.

The MAGISTRATE : There are two summonses.

Mr. MELSHEIMER : Yes, sir, the other is for the use of the word "Dentist." That, of course, is a minor matter.

Mr. RICHARDSON : There will be a penalty of £5 and 3 guineas costs.

HOSPITAL REPORTS AND CASES IN PRACTICE.

Some Cases in Practice.

[Communicated by Mr. F. HARRISON, of Sheffield, to the Midland Branch.]

It is my hope, in the short paper which I am going to read to you, to give a concise but interesting account of a few cases which have occurred in my practice.

I have selected cases exemplifying the ordinary rules and methods of practice—also cases of special interest.

Under the first head I shall recite four cases.

The first is that of a young married lady who was suffering from sub-acute pulpitis in the right lower molar. She appeared determined to have the tooth removed. I refused because I imagined that the patient was *enceinte* ; and I thought I remembered something of a previous abortion. I advised the patient to allow me to consult with the husband. The husband was of the same opinion as the wife, and refused to submit to any method of treatment but the extraction of the tooth. I declined to perform the operation.

A message was sent the following morning informing me that

labour came on during the journey home and that the patient aborted immediately upon the arrival at their destination. The child, which was barely seven months, did not survive. This case only needs reading to show its moral.

Dr. Whitehead informs us "That the relative frequency of immature births in the first, second and third epochs of pregnancy of three months each will stand in the relative number of 16·4·1. These facts show us that we should especially avoid any operation calculated to produce reflexes during the first three months of gestation, and avoid it as much as possible during the second epoch. After the seventh month it would appear that since the chances of abortion are so remote, and that should labour supervene that the child would live, we may consider ourselves justified in removing a tooth if we feel the necessity.

The next two cases illustrate the successful treatment of ulcer upon the oral mucous membrane.

In the first case a chronic ulcer was situate upon the mucous membrane of the hard palate ; slightly to the right of the median line. The patient had noticed it for six months, and no cause could be ascribed. I applied nitric acid and succeeded in forming a small slough, but the ulcer did not heal. The surface was next well scraped with a Volkman's spoon, after which slight signs of healing appeared, but the ulcer remained in a stationary condition until the administration of a mixture of five-grain doses of potassium chlorate, when the ulcer rapidly healed.

Another interesting case may be described in which chlorate of potash played the part of a specific in ulceration of the mucous membrane of the mouth.

A boy, æt. 6, had lately returned from India where he had been residing for three years. The two upper central incisor milk teeth were necrosed and irritating the mucous membrane of the upper lip. They were extracted and a small ulcer was found at the reflection of the mucous membrane. Four days later the boy was brought again to me with a rapidly spreading sloughing inflammation of the gums and cheeks of both sides. I applied nitrate of silver in stick, but the case was considerably worse the next day. A mixture containing three-grain doses of pot. chlor. was given. It was evident at the succeeding visit that the disease had received a check. The same course of treatment was continued, and in three days the ulcers were healed and the mouth presented a fairly healthy appearance.

I will now relate two cases of epulis which prove the necessity for the removal of the tooth, the periosteum and the bone, as well as the growth, in order to prevent a recurrence of the disease.

The first patient presented a large epulis, situated behind the lower central and lateral incisors. The growth was convex on the lingual aspect, flattened on the gingival, and lying against an hypertrophied gum edge. There were no carious teeth in the area of the growth, and the central incisor teeth between which the pedicle was attached were separated and loose, and had a considerable deposit of tartar upon their roots. The growth was described as of two weeks' duration, but of course that could not possibly be correct. Since there was such a distinct pedicle and no apparent cause for the trouble, one felt that one would like to try a mild form of treatment, consequently I divided the pedicle and easily removed the growth, then scraped the remaining portion of the pedicle away down to the bone and thoroughly scaled the teeth. I saw the case again and it appeared as if the treatment would be satisfactory. In ten months' time the growth recurred and presented the appearance of a rapidly growing tumour, situate behind and also infiltrating the tissue in front of the incisor teeth.

The more radical operation was now performed. Ether was administered, the lower fronts and the lower left lateral were removed. The structures around were rigorously scraped with an artificial finger nail, the bone cut down with forceps and chloride of zinc applied. The periosteum of the left lower front was soft and greatly increased in quantity, having somewhat the appearance of a large abscess sac. It is now a year since the operation and there is not the slightest sign of recurrence.

The second case of epulis has many things in common with the first. It is shortly this: An epulis was growing between the right lower canine and a badly fitting clasp which was supposed to fit around that tooth. The canine was free from caries. As the growth was only small, and one felt that the badly fitting denture was probably the principal cause, I removed the growth and made a frame to fit the canine tooth accurately. The disease was cured for the time, but it recurred in three years' time as a rapidly growing tumour, displacing the lower frame. The canine tooth was removed and the growth came away with it, firmly connected to its periosteum.

During the last year Sheffield has been suffering from an epidemic of lead poisoning. A large number of my patients have

suffered more or less severely. Although the dentist has less chance of studying this disease than the medical practitioner, still he should be able to recognise it when present. Several patients, who were undoubtedly suffering from plumbism, consulted me, referring all their symptoms to some derangement of their dental apparatus, and not having consulted their medical men, were quite unaware of the real cause of their suffering.

I shall conclude by describing the case of a young lady, æt. 23, who suffered from a typical attack, such as would come under the notice of a dentist, that is, without the extreme symptoms, such as colic, wrist drop, &c. The patient, who a year ago presented all the appearances of robust health, was now very pale and anæmic, and only capable of very slight exertion. There was evident bloodlessness. The conjunctiva was white. The gums, though dense and otherwise healthy, were bleached and presented a very faintly marked blue line on the gum edge on the distal side of the left upper front tooth. The teeth were free from any deposit of tartar, and the gum was normally adherent to the necks of the teeth. There were a number of various kinds of plugs in the teeth, but all were doing well. The subjective symptoms were principally severe and depressing pain, generally referred to some otherwise healthy tooth. This symptom, together with a general but low type of neuralgia of the tri-facial, I found to be present in nearly every case. There was great constipation and loss of appetite. The above symptoms naturally made one suppose the presence of lead. The drinking water was examined and found to contain 0.45 grains of lead per gallon. The treatment consisted in freeing the water from lead and other impurities by means of proper filters, and the administration of a mixture containing ferri. sulph. and mag. sulph., gradually increasing the amount of iron, beginning with doses of half a grain. Hunyadi Janos water corrected the constipation. The neuralgia and blue line disappeared. The patient is now feeling much relieved and enjoying moderately good health.

APPOINTMENT.

H. A. LAWRENCE, L.D.S.I., Dental Surgeon to Miss Mayo's Orphan Home for Girls, Ealing.

ANNOTATIONS.

ON another page we publish the report of the case of "Smith v. H. F. Partridge" before Mr. D'Eyncourt, on the charge of using the name and title of Dentist and the letters L.D.S. (signifying licentiate of Dental Surgery) notwithstanding the fact that his name had been removed from the Dentists' Register for "disgraceful conduct from a professional point of view." The General Medical Council had found that the defendant Partridge had "wilfully violated the declaration made and subscribed by him, whereby he declared that as long as he held the diploma of Dental Surgery of the Royal College of Surgeons in Ireland, he would not attract business by advertising or any other unbecoming practice; and that the offence was, in the opinion of the Council, disgraceful conduct in a professional respect." It has been the custom of the Colleges of Surgeons of England, Ireland, and Scotland to demand of their alumni on receiving their diploma an undertaking to avoid such improper and unworthy methods of beguiling patients, and it is very rare to find the undertaking violated, still more rare to find the violation persisted in. The consequence of this conduct, which has been found by the Medical Council to be "disgraceful," has been the final removal of the name of Partridge from the Dentists' Register. In defiance of this withdrawal of any right to use any title inferring that he is a registered dentist, Partridge has still styled himself "L.D.S.," and has consequently been fined five guineas and three guineas costs. A warning may, perhaps, be taken to heart from this case by those who think that the Dentists Act may be treated as a dead letter.

THE case of "Smith v. Hunter and Cox" was heard at Worship Street, on Tuesday, the 14th. The magistrate will give judgment on Tuesday next. A full report of this case will appear in our next issue.

If gentlemen going to Dublin by the 7.15 a.m. train on Wednesday, August 22nd, will send their names to Morton Smale, 89, Seymour Street, W., before the 20th, stating class they intend to travel, he will have carriages reserved for them.

THE annual dinner, which—doubtless on the principle of work before play—usually takes place at the close of the meeting, is

fixed this year for the evening of the first day, Thursday. *Members would do well to make a note of this*, as otherwise, guided by custom in such matters, they might make engagements which would put them to inconvenience.

THOSE members who wish to secure the mahogany bottle-racks should make early application. A number have already been sold, and as the rule will be first come first served, those who apply in good time will, of course, be in the best position. They will be sold at 15s. each, which is the cost price.

THOSE of our members who purpose prolonging their stay in the Sister Isle might do well to procure a copy of "Tours in Ireland," a work published at the office of the *Irish Times* in Dublin. They will find some information in its pages which may be of service to them, and many suggestive hints for pleasant wanderings. We believe that a special edition of the book has been prepared for the Irish Exhibition at Olympia, where, of course, it is on sale.

THE MUSEUM CATALOGUE.—We believe that it is intended to present each member with a copy of this catalogue at the table on which lies the members' book for signature (*vide* programme). Any additional copies may be purchased for one shilling each. They are printed in a form which will admit of them being bound up with the Journal of the Association.

A CONVERSAZIONE of the London School of Dental Surgery was held on the evening of July 20th at the Dental Hospital, Leicester Square, at which the prizes won by the students were distributed. Sir Edwin Saunders received the company in the lecture theatre, which had been very artistically decorated by the Liberty Co., as were all the other rooms. After the reception of the guests, of whom many were ladies, the distribution of prizes took place, the Earl of Lathom presiding. Mr. Morton Smale read a short report of the work of the hospital, in which he pointed out how necessary it had been since the last gathering of a similar nature at the rooms of the Medical Society to enlarge the hospital, and how, thanks to the assistance in a large degree of Sir Edwin Saunders, the enlargement had taken place, so that besides lecture theatre, extracting room, anæsthetic and other rooms, there was now a stopping room holding 45 operating chairs which were in daily use. He also announced with regret that he had

received a letter from Mr. Hutchinson, resigning his appointment as lecturer on Dental Surgery, which he had held 12 years. At the close of the Dean's speech the prizes were distributed by the Earl of Lathom. Mr. W. H. Dolamore was the chief prize winner, having gained no fewer than four first prizes (metallurgy, operative dental surgery, dental anatomy, dental surgery) out of five competed for, and by so doing won the scholarship endowed by Sir Edwin Saunders, which is annually awarded to students who get most first-class prizes. He also secured the prizes given by Messrs. Ash & Sons. He was heartily applauded on receiving these rewards. The other successful prize-winners were as follows:

Mechanical Dentistry: 1st, A. E. Manton; 2nd, A. Black. Certificates: E. J. Preedy, H. C. L. Hope, F. A. Harsant, R. H. Bates, A. W. W. Hoffman.

Metallurgy: 1st, W. H. Dolamore; 2nd, F. A. Harsant. Certificates: J. G. Turner, H. A. Washbourne.

Operative Dental Surgery: 1st, W. H. Dolamore; 2nd, R. H. Bates. Certificates: F. A. Harsant, A. D. Horne, J. G. Turner.

Dental Anatomy: 1st, W. H. Dolamore; 2nd, E. H. Manton. Certificates: F. C. Porter, F. A. Harsant.

Dental Surgery: 1st, W. H. Dolamore; 2nd, J. G. Turner. Certificates: J. Dunlop, J. A. Mallet, F. C. Porter, A. R. Colyer, A. W. W. Hoffman.

At the close of the distribution the Earl of Lathom addressed the assembly and expressed great admiration for the work done at the hospital, and congratulated the students on their successes. A vote of thanks was moved by Sir Edwin Saunders to the Earl of Lathom, seconded by Mr. Sibly, after which the guests were entertained by Mr. Bertram and Mr. Eric Lewis. There was also a phonograph exhibited in the Council room, and refreshments being also provided, the social gathering proved a great success.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—During the July sittings of the Examiners the following gentlemen passed the First Professional Examination for the Licence in Dental Surgery:—Frederick John Bonnalie, Chester; Andrew Kinsman Brittan, Devonshire; Alexander Kay Finlayson, Leith; John Alexander White Kirkpatrick, Leith; Henry Reginald Fryer Brooks, Banbury; James Seymour Allen, Derbyshire; John Henry Cormack, Edinburgh; Frederick Leonard Floyd Masters, Huddersfield;

Lawson Storrow Shennan, Houghton-le-Spring; John Henry Larbalestier, Southampton; Herbert Sydney Welham, London; and the following gentlemen passed the Final Examination and were admitted L.D.S., Edinburgh; Henry Reginald Fryer Brooks, Oxfordshire; Henry Brooke Dew, Somersetshire; and David Alexander Cormack, Edinburgh.

THE Cricketer Club of the Dental Hospital of London has had a successful season; out of fifteen matches eight have been won and three drawn. The bat presented by Messrs. Ash has been won by the Captain, J. F. Colyer, whose average was 25.7, and he has also secured the ball with a bowling average of 5.2. A. R. Colyer won the hospital bat.

WE are pleased to see that several medals have been won by Dental students at Charing Cross Hospital this summer. By A. W. Hoffmann, for *Materia Medica* and *Practical Physiology*; by J. H. Day, for *Practical Chemistry*; by W. R. Barratt, for *Osteology*; and by J. F. Colyer, for *Obstetrical Medicine*.

CORRESPONDENCE.

We do not hold ourselves responsible for the views expressed by our Correspondents.

The Annual Meeting.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—As you are aware, we have taken great pains to carry out the work of organization in an orderly and business-like way for the Annual General Meeting in Dublin, and you have been most indulgent in granting me space in the Journal, so that by means of a monthly letter the members can be kept fully informed of the nature of our arrangements. The reply cards are coming in now from day to day, and I did not think it was possible for human ingenuity to give any other answers to the questions asked save yes or no. I assure you, Sir, my heart will be broken by the senders of some of these same post cards. Some do not answer "yes" or "no," and sign their name. Some scrawl a great big yes or a smaller no; others make an endorsement like that on a crossed cheque that they are going to Norway or Timbuctoo, and even sometimes to bed. This may be *entertaining* to the senders of the cards, but is rather perplexing to me, as it will not afford the opportunity I wished of having all our details working smoothly. I shall therefore paste the cards in a book for reference, and if any one complains that this or that has not been done for him,

a reference to the book of cards will tell whether there is or is not good reason for his complaint.

The policy of appointing an Annual Museum Committee to co-operate with the Local Committee in collecting and forwarding to the place of the Annual Meeting material of scientific interest has proved a broad-minded and sound one, for out of a Committee of forty-eight members only six have failed to contribute to the collection directly or indirectly. To this zealous majority the hearty thanks of the whole Association are due, as the result has been to form one of the most complete and interesting collections of the kind, and we are afraid the only people who will not be pleased are those who promised liberal support, yet singularly enough failed to take the slightest notice of repeated reminders to contribute. The "bottled teeth" will number over 800, and their vintages have been found by sample to be as follows :—

Odontomes, enamel nodules, supplemental cusps, degeneration of wisdom teeth, supernumerary teeth, abnormal number of roots, less number of roots, fusion of roots, abnormal curving of roots, bayonet-shaped roots, oblique roots, teeth with cupped apices, diverging roots, dilaceration, gemmination of teeth, fusion by cementum, macrodonts, microdonts, exostosis, calcification of pulp, absorption of roots, absorption of roots from blows or falls, erosion, attrition, fractures of teeth, salivary calculus, pus calculus, sanguinary calculus, stained dentine, complications in extraction, pitting of enamel, mercurial teeth, arrest of decay, neuralgia, ancient teeth, pivoted teeth, joined pivots or early bridge work, replantations, miscellaneous. The models or casts will run to about 600 or so, and there is a splendid collection of bone work, bone sets with natural teeth, bone sets with mineral teeth, some laughable experiments by "'prentice hands" or "guinea jaw" practitioners in vulcanite. Examples of celluloid, celluloid and vulcanite, continuous gum, and the Cumming process, a wonderful variety of obturators of all kinds, hard and soft, and a most interesting collection of dental instruments, some almost the same as those figured in the works of Ambrose Paré. I have not space to minutely dwell upon the natural history specimens and the workmen's section, but quite a number of novelties will be seen here that ought to draw many of us to consider whether we give ourselves the best results in rapidity and precision of work by still adhering to the old-fashioned benches and appliances suited only to jewellers.

THE ASSOCIATION AND GENERAL ENQUIRY OFFICE will be found next the entrance to the Museum. Members should at once sign the Associates' Book or members' attendance list on arrival, and we have made arrangements by which eight or more members can sign at the same time. Members who have correctly replied to our enquiries will find *specially directed envelopes* containing the tickets for the entertainments they wish to attend, ready for them on production of their cards

of membership, after they have, signed the book. In this office members *only* can purchase ladies carriage excursion tickets, luncheon tickets, &c., and it will be necessary in all cases to shew ticket of membership to Mr. Pink and Mr. William Shea, who will be in charge of the office. The Museum and Theatre for Annual Meeting are on the same floor, and in this fine room will be found "The Confessional" for Mr. Smith-Turner and his aides, and Sections I., II., III., IV., of Museum. Off the Museum, entered by two arches, is the CORRESPONDENCE ROOM where members can obtain stationery, railway and other guides ; in it will be found the TEMPORARY POST OFFICE and a number of tables supplied with pens, ink, &c. The members enter the Theatre by the passage on the right of Annual Museum as you enter, and the officers of the Association, the Press, and readers of papers will enter by the door from the Correspondence Room. If the members will kindly observe this little regulation much comfort will result to all parties. The Museum, I may venture to point out, will form an *admirable* Conversation Room, where this fascinating and agreeable pastime will not disturb the readers of papers or the speakers in the discussions. The DEMONSTRATIONS, nearly thirty in number, will take place in the Surgery Museum entered from the Front Hall of the School of Physic, and is on the top storey ; so that the second morning will be a very busy one indeed. Every member will be furnished, on arrival at the Association and General Enquiry Office, with a brief syllabus or statement of the different arrangements we have made ; and if the directions there given are steadily carried out we venture to hope that our members will find it to their advantage to fall in with them, as they have been designed for their sole comfort and *convenience*. I have also to assure our members that they will not be "entrapped" or badgered or teased about the Benevolent Fund, and that if the promptings of a kind and charitable heart do not exist amongst all dentists, we must only go on patiently working and hoping to place them there by the influence of the British Dental Association. We are painfully aware, from the number of carelessly filled up replies that have come to hand, that order and regularity do not appeal to a large number of our members, but we hope, nevertheless, they will not run counter to our arrangements, but rather fall in with them as tending to afford the greatest possible pleasure to the greatest possible number. In conclusion, I have to thank you, sir, and the General Committee, for the liberal, nay, generous support you have given us in the pages of the BRITISH DENTAL ASSOCIATION JOURNAL ; we must only hope to find (if we survive all our anxiety and hard work) that in the September number of the Journal the members who attended the meeting will say we not only deserved your aid and confidence—but earned it. I am, Sir, yours most obediently,

W. BOOTH PEARSALL, *Hon. Sec., Irish Branch.*

13, *Upper Merrion Street, Dublin, Aug. 6th, 1888.*

The Post Graduate Courses.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—It was just because I had "some respect for truth," as Mr. Morton Smale puts it, that at the York meeting of the Midland Branch I thought it wise to at once seize the opportunity of testing so injurious a rumour, that the Dental Hospital, the College of Surgeons and the British Medical Council were conspiring to give qualified medical men who attended a six months' post graduate course at the Dental Hospital, the L.D.S. diploma.

This ugly report was becoming talked about, and as Dr. Walker and Mr. Matheson, for whom we have a great respect, were both in the room, the matter could at once be settled; and it was so settled by Dr. Walker rising to say there was not a shadow of foundation for it. There the matter ended, and I expected to hear no more of it. But I altogether differ from your correspondent, Mr. Morton Smale, that it would have been better to have allowed the rumour to smoulder and rankle in the breasts of forty or fifty angry men, until it broke out into furious flame.

Since, however, Mr. Smale has drawn attention to the post graduate courses for medical men, I would with great humility venture to remark that I do not at present see that the Dental Hospitals are right and just, either to their old or present students in giving this special technical instruction for the sum even of ten guineas, while such is the emulation of competition that the National Dental College is offering a course of nine lectures for £3 3s.

Now, Sir, it has been laid down over and over again, *ad nauseam*, I should think, that the L.D.S. diploma is the one qualifying thing for the dentist to aim at, both for his own education and for the benefit of the public. To gain this many of us have worked hard, spent laborious days and burnt the midnight oil, while scores of our sons and pupils are now doing a nearly six years' curriculum for the same object.

When the Dentists Act of 1878 was passed to purge our profession from improper practitioners, qualified medical men were exempted from the operation of its penal clauses. Surgeons knowing nothing of dentistry were allowed legally to practise it. That is, a man having three and a-half years' education of a general medical and surgical character, and with no special dental education whatever, was placed on an equal footing, so far as the law is concerned, with a regularly trained, apprenticed, curriculum dental student, who has, after a searching examination at all points, acquired his L.D.S. diploma; or with one of us, who has been in the daily practice of dentistry as his only means of livelihood for twenty, thirty, or forty years, and has perhaps then submitted himself to a full examination.

This was bad enough in all conscience, but we were told it was necessary to grant this sop, or we might never get the exclusive Act

we wished. We had a bulwark left, however, even then, from the incursions of second or third-rate qualified medical men, who could not get on in their chosen professions, and would come into ours and flaunt their medical diplomas before our faces and those of our patients. We had the bulwark of their entire ignorance of the now greatly advanced dental art, and we have for years been educating ourselves and the public in the belief that the licentiate in dental surgery is the qualified dentist, and that he is the man who should alone practise dentistry. It seems to be a dream.

We would have refused to take any qualified medical man into our work-rooms and surgeries, and initiate him into the processes of dentistry for six months, in order that he might set up in practice next door, or next door to our neighbour in the next town, and so injure our sons, our pupils, and delude the public, even for ten guineas. Ought then those centres of light and leading, our dental hospitals, to flood us with these adventurers, when we have our hands full enough with the unregistered and the advertising L.D.S.?

If the authorities, though, after full consideration, have decided that these post graduate medicals make equally good dentists, and will be equally successful with the licentiates, it will be much the cheaper course for us to adopt, *i.e.*, drop the L.D.S. altogether.

Perhaps Mr. Smale may say these lectures and two-hour demonstrations are not intended to make practical dentists, but only to give the medical man a smattering—"some operative knowledge." May I return the retort courteous, and say I believe him to be far too great a lover of the truth to say this?

But of what use in general surgery can subjects such as these be:—"Immediate treatment of pulpless and abscessed teeth, gold crowns, regulating plates, bridge work, continuous gum work, cohesive gold, beaded ligatures for rubber dam, contour vulcanite work," &c., &c.

Is a surgeon in general practice intending to remain so going to throw away ten guineas to see these things, in order that he may appreciate dentists the more? Why, sir, it would beat the Royal Agricultural Show. It is an insult to our common sense. There is a good deal of selfishness behind ten guineas now-a-days.

However, Sir, I must close this long letter which Mr. Smale has let me in for. I had hoped to have remained quiet for some time, and in conclusion would thankfully acknowledge the justice of Mr. Smale's remark *re* the post graduate medical student, that "when he leaves the hospital he has nothing but the formal receipt for his fee to show he has had such instruction."

I think in common fairness the names of such recipients should be published, in order that we may know these birds of passage when they fly to nest our way.

Your obedient servant,

HENRY BLANDY.

Tin and Gold Plugs.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—The following correspondence, which is just to hand, settles very clearly the absence of any claim of Dr. Abbott to the use of this combination. My previous statements are more than proved as the correspondence shows that Dr. Abbott not only has no claim whatever, but that he "scouted the idea," and only adopted it after very positive proof that the system was better than his own.

Although not connected directly with the question of gold filling, I retain sufficient interest in the art and sufficient desire that a good operator with original ideas shall be fairly recorded, to be pleased that my constant advocacy for Mr. Lomax should be so thoroughly proved to be correct, and it is well that the matter should be so clearly settled.

THOMAS FLETCHER, F.C.S.

Warrington, July 13th, 1888.

"1, Burlington Street,

"Oxford Street, Manchester,

"*July 10th, 1888.*

"DEAR FLETCHER,—Visiting Manchester for a few days, I have had my attention called for the first time to some lectures on the subject of Gold and Tin Fillings, by Dr. Miller, of Berlin.

"I notice the claim made to the discovery for this mode of filling by Dr. Miller, for his father-in-law, the late Dr. Abbott, of Berlin; and your letter asserting that fillings made by me were well before the public long before the date named as the time Dr. Abbott *discovered* this mode of practice.

"Enclosed you will find two notes sent to me by Dr. Miller, inspired no doubt by your letter. In my reply I stated that in 1853 I called on Dr. Abbott, and amongst other subjects, discussed the merits of gold and tin as a filling, that he scouted the idea as being absurd, nothing but gold being admissible as a filling according to his belief. After that time Dr. Abbott had opportunities of seeing many fillings made by me with gold and tin, and I was aware of his afterwards trying the same in his own practice. I will now state to you how it came to pass that I first used gold and tin as a filling. About 1845 or 1846, Mr. Sidney, who practised here and who paid much attention to the filling of teeth, used to employ tin for large cavities in bicuspid and molar teeth; these fillings were very well made, but when on a masticating surface, I noticed they quickly wore down and assumed a cup-like shape, the edges of the cavities becoming exposed and eventual failure being the result. Noticing the merits of tin as a filling, I thought by adding gold to that material, I should probably get over the defect of softness. You and many other dentists must be very familiar with the result, and I dare say most of my dental friends are weary of hearing me advocate the merits of gold and tin, which I did both in and out of season.

"I send the two notes from Dr. Miller, with a translation of the one in German for your perusal—notice the dates; return to me at your convenience. I thought you might like to have these particulars, as your letter told me you took a sufficiently lively interest in the subject to prevent any little merit there may be in the application of gold and tin as a filling being diverted from its true source.

"I am, dear Fletcher, your truly,

"(Signed) JAMES W. LOMAX."

"January 17th, 1888.

"DEAR MADAM,—I should be very much obliged if you could let me know if Mr. James Lomax, of Manchester, still practises, and if he was acquainted with my father-in-law, and if he used tin and gold for filling teeth? You must forgive me for asking so many questions at the same time. It is a question if it were Mr. Lomax of Manchester, Dr. Abbott of Berlin, or Dr. Spooner in America who first used the now celebrated combination of tin and gold.

"(Signed) PROFESSOR MILLER."

"Mr. JAMES LOMAX,

January 24th, 1888.

"DEAR SIR,—Allow me to thank you for your kind response to my enquiries. I would still like to ask whether you have found that the combination is sufficiently hard to withstand mastication on the grinding surface? Also how you account for the hardening of the material? Third, what effect moisture has upon the filling, that is, is the filling materially injured by the access of saliva during the operation? Fourth, in what way do you think the gold deteriorates by lying in contact with tin? Fifth, do you fold the tin or the gold outside? Will you allow me to make use of your letter and your answers to the above questions, in any communications that I may make upon this subject to the journals?

"With many thanks for your kindness, I am, dear Sir,

"Very truly yours,

"(Signed) W. D. MILLER."

NOTE.—ANONYMOUS letters directed to the Secretary of the Association cannot receive attention.

P.O. Orders must be accompanied by Letters of Advice.

Communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

Subscriptions to the Treasurer, 40, Leicester Square.

All Contributions intended for publication in the Journal must be written on one side of the paper only. The latest date for receiving contributions for the current number is the 5th of the month.

SPECIAL NOTICE.—All communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

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A
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VOL. IX.

An Irish Welcome.

"UNLIKE wise men in another place," to borrow the happy expression used by Mr. Brownlie in his address, "we have solved our Irish question," and we may say without fear of contradiction that the solution has proved worthy of the occasion. Every annual meeting of the Association possesses special features of interest that are not to be found elsewhere, and naturally such features abound when the place of meeting happens to be an ancient capital, but when, as was the case with many of our members this year, the meeting is the occasion of a first visit to such a city as Dublin to receive such a welcome as we received this year, it is likely to be long remembered as one of the most memorable meetings of our profession.

The absence of vexed questions requiring discussion in solution was of itself a matter for congratulation. Moreover, the Hon. Secretary's report, telling as it did of

successful prosecutions carried out against quackery, and of an unprecedentedly large accession of new members to our ranks to the number of 121, as against 50 in the previous year, was calculated to put the meeting in a good humour with itself and with its executive. The sub-editor had to tell of increased circulation and growing advertisement columns, and lastly, considering the kind of summer we have been enduring, the weather was propitious.

From a scientific point of view the work done was good and several new departures were inaugurated which will, we trust, become annual features. The Annual Museum quite surpassed our expectations, and we hope to see Mr. Pearsall's bottle-racks adopted wherever curious dental specimens are exhibited. The Odontological and Odontochirurgical Societies might adopt the plan with advantage. The microscopical show, although interesting only to a limited number of members, was the best we ever remember to have seen devoted to dental specimens. Owing to the kindness of Professor Purser, Dr. Arthur Baker was able to place seventy microscopes at the service of the exhibitors in a room, the lighting and arrangement of which left nothing to be desired.

The demonstrations were also of a very interesting character, and the room in which they were held was large, light, well-ventilated and admirably arranged, but all these matters we have more fully noticed elsewhere. If the work was good what shall we say of the play? Our Irish friends had tremendous advantages, surrounded as they were by so much that was interesting, wonderful, and beautiful or novel, and being moreover, in the matter of playing host "to the manner born," and they certainly made the most of such advantages. While the gentlemen of the party were busy with scientific discussions, learned papers, or interesting demonstrations, the ladies were escorted about seeing

the sights and storing their memories with pleasant recollections of a dental meeting. Our daily gatherings at luncheon in the great hall of Trinity College were a delightful innovation, and rendered doubly pleasant by the happy experiment of inviting the ladies to join us. Private hospitality vied with official hospitality in acts of kindness that cannot ever be forgotten although they cannot be recorded here; we can only hope for the day when we may find an opportunity of giving our late hosts a welcome on the other side of the channel.

Elsewhere we endeavour to describe the meeting in detail; taken as a whole we do not hesitate to say that Dublin has established a record. If in the great machinery of arrangement necessary to work so large a meeting there were occasional details that might have been otherwise with advantage, we can only say this will surprise no one who has ever had any practical experience in such matters. Everyone of the Irish executive deserves the greatest credit and most genuine thanks, from the genial president downwards; the special work done by each member is duly recorded elsewhere. It is inevitable that the lion's share should fall to the lot of the local secretary, and no one can suggest that Mr. Pearsall shirked either work or responsibility or that he gave us his time and labour with a grudging spirit. Unbounded energy and unselfish hard work must produce their result, all the committee displayed these qualities, and as a consequence the meeting went from first to last with enthusiasm and must be recorded as our most triumphant success.

The Case of Smith v. Huntley v. Coe.

THE case of Smith versus Huntley v. Coe, which was tried before Mr. Bushby at Worship Street last month, and is fully reported at another page, resulted in the conviction of both defendants and the infliction of a fine of £5 in each case. Mr. Waddy, the counsel for the defendants, conducted the defence with his usual ability. His contention that the writing D.D.S. after a man's name did not amount to holding himself out as being a person qualified to practise dentistry, although in the defendant's case the letters were allowed by everyone to mean "Doctor of Dental Surgery," and were employed by the defendants at a place where they did practise dentistry, was a fair sample of the weakness of his case. Two matters should be plainly understood by all parties concerned in similar prosecutions. The first is in connection with a joke which Mr. Waddy generally indulges in in these cases, of speaking of this Association as "the three tailors of Tooley Street," inferring thereby that we endeavour to persecute and repress those who are every whit as good as, if not better, than ourselves, by virtue of some purely technical disability under which they may labour, such as the possession of an unregistrable American diploma; in fact he endeavours to leave a sensation in the minds of his hearers that we act from motives of what may be conveniently summed up as professional jealousy, we need not tell our readers how far this is from being true. Mr. Waddy has, doubtless, not had sufficient leisure to inform himself of the true status and objects of the Association, moreover, when all other forensic weapons are unavailable, this imputation of sordid motives will sometimes impress the minds of those who are unacquainted with the parties to the case and to whom the whole issue is a novel one. Of course, if Mr. Waddy had been acquainted with the character of the Association he

could not have made the insinuation, because it would have then been a wilfully misleading instead of being simply a foolish suggestion.

The second point is that over and over again Mr. Waddy reiterates the inference that those American dental diplomas which are not registrable are superior as evidences of professional capacity to our own diplomas. Now this is a rank absurdity, which should be promptly denied by those who are able to speak with authority and without suspicion of prejudice. It is high time that we heard a word of disavowal from those quarters from which it would come with weight.

Mr. Waddy's manner of handling the case was described by a witness as "funny," an adjective which the learned counsel repudiated, and we think with justice. It does not read funnily, but it shows more than anything else the weakness of the cause, seeing that it could only be in default of serious argument that an able counsel could have recourse to such methods.

ASSOCIATION INTELLIGENCE.

Western Counties Branch.

(Concluded from page 517.)

THE PRESIDENT then delivered his address as follows :—

GENTLEMEN,—I am sorry I cannot commence my address by thanking you for the honour of being your President at this meeting. To many of you it will, no doubt, be an unpleasant surprise to find the President elected not here; my apology is that he finally declined the position, and your council asked me to take the place at their last meeting. On so short a notice I must lay the burden of any shortcomings you may find in my address, or the arrangements of the meeting. I have, however, done my best under the circumstances, and hope for the rest that you will take the will for the deed. I suppose many of you have received a pamphlet from Mr. Bullin, which, from his position as President

of the Midland Branch of the British Dental Association, will have received attention. I propose to make his address a peg on which to hang some reflections of my own. In the first place, let me frankly state that I think his address calculated to do both harm and good. Harm, decidedly, in its general tone, as calculated to stir afresh class and professional jealousies between ourselves and the medical profession; harm, decidedly, in the misconception which he evidently labours under, and wishes to convey, of the work of men, who, whatever defects may exist in their work, have been the only ones who have carried any scheme for the better education and organisation of the dental profession to a successful issue. Good, in that he has emphatically reminded us that eventually it is only within our own borders that we must look for safe and beneficial guidance and government. No other body of men, however learned, or powerful, or judicious, can so well as we ourselves understand our own rights and interests. With many of his feelings, I, for my own part, and I dare say many of you, cannot help sympathising, but I think such feelings are better controlled than expressed, being sure that just so far as we can make sound knowledge and practice go hand in hand to the benefit of the community, will our real value as a profession be recognised, not only by the medical profession, but by society at large. A calling does not entirely rank according to its necessity to the community, or a provision dealer might claim a foremost place; nor according to the risk which its followers have to undergo, or a private soldier might rank before his officer; but in a great measure according to the inheritance which it enjoys and employs—the results of the labours of its ancestors. Among the learned professions this inheritance or capital is largely the knowledge of their particular field, which forms the education of their students. Societies are selected by a definition composed of two parts, that which includes or admits, and that which excludes, and this doorway should be framed and kept, as well as poor mortals can, as a door of truth which should let in all who are worthy and exclude all who are unworthy, remembering that those who climb over the wall some other way are not to be commended. We all know the Dentists Act of 1878 took a very comprehensive sweep, including in the Register a great many as dentists who had but a colorable right to that title, rather than injure any vested rights. In the first Register these were defined under four classes: (1) those dentists who were *bonâ fide* in practice before the passing of the Act;

(2) those who had "dental qualifications;" (3) those who practised it "with medical qualifications." (4) those who practised it in connection with pharmacy. Now of this latter class, out of about 5,000 registered dentists, there were more than 2,000. In the latest Register, 1887, 5,207 are registered as dentists; of these 857 are registered as possessing dental or medical qualifications, and 4,243 as being in practice before July 22nd, 1878; but, strange to say, not one of these is registered or registrable in connection with pharmacy. As no one could have been registered since 1878 without a dental qualification, this number necessarily includes all the survivors of the over 2,000 who entered under this connection. I do not think this omission would have taken place if the Register had been more under our own supervision, and however it has occurred, I would point out to our pharmaceutical friends that it lays a slight implication on them to which I would draw their attention.

Although we are now affiliated to the medical profession it is doubtful if we originally sprung from them. I incline to the opinion that we must look for our origin rather to the craft of goldsmiths, with some help from turners and bone carvers. But although the adaptation of artificial work may have initiated our speciality, as it is still our sheet anchor, and brought in its train the necessity of surgical and medical knowledge, the treatment of inflammations and neuralgias necessitated our applying to the accumulated culture of the medical profession for the necessary information, and the sympathy which the pursuit of similar knowledge produced has finally induced us to seek and obtain affiliation with that profession. But, although we have much to gain by such a connection, it must not be lost sight of that we do not come empty handed. If the medical profession keeps people from dying, we help to keep them alive by keeping their teeth in repair and supplying substitutes, of which I think we may fairly say that no artificial substitute of a lost natural organ so efficiently fulfils the natural functions.

In the histology of dental tissues we have done good and original work. In the pathology and treatment of the teeth, of course, we stand the authority; whilst in anæsthetics we have also done good and original work—if, indeed, modern anæsthesia may not be said to have been originated by dentists, "Horace Wells," an American dentist, being, I believe, the first who practically demonstrated it, extracted a tooth painlessly under nitrous-

oxide gas, on September 30th, 1846. With anæsthetics, dentists have since then been continuously practised and familiar, and are on the whole, probably, as expert in their administration as any other branch of the medical profession. In evidence of the good work which dentists have done in the literature of anæsthesia let me relate a case in practice. A few years ago a medical man in the town desired my opinion on the case of a young lady who was suffering severely from odontalgia. I advised the extraction of three molars which were decayed to the level of the gums and had exposed pulps. He demurred to her having an anæsthetic, as she suffered from epileptic fits. The idea of getting them out without seemed hardly practicable without using very severe measures, which we were loth to do. I showed him the opinion given in Underwood's "Notes on Anæsthetics" that nitrous oxide was innocuous in such cases. It was administered, she had out the teeth, and only had one fit after.*

Naturalists tell us that in the process of life on the earth there seem to be particular times when species are differentiated with great facility and energy, which change at last reaches a place of greater rest, wherein the species remain with slight change for a comparatively long time, until the change of external conditions requires a higher development to meet the strain of the friction of life. If this is true of human professions, I think it is particularly applicable to our profession at the present time. As far as we can judge, there have been greater advances in practice, and methods of work, more numerous experiments, greater elaborations, and exquisite finish, in instruments and appliances, and more thorough and exhaustive inquiries into the elementary laws and facts which should govern our practice during the past fifty years, than during many hundred years previously. Under such conditions we must expect to find a certain instability about the fees received for our work. There is doubtless a general war going on between the professional man and the public, the first trying to better his position, the second anxious that he should not better it too much. What is the best way to settle the matter? Uniform fees are evidently just to neither party.

Let me take as an illustration the case of a filled tooth as a unit of value. Suppose a dentist has found that, putting in fillings with

* In the original address it was stated that "She never had another fit." Since then, however, I have seen the patient's mother, who says she did have one fit afterwards.

an average of five years' life, they are worth to his patient x . Now, if by more elaborate and costly work, or improved methods he can make their average life ten years, what increase of fee ought he to have? Taking the wear and tear of average life, and its exigencies and probabilities, I should say that a filling lasting ten years is fully thrice the value of one lasting five. But it does not cost him thrice the toil, and the community will resent his absorbing all the advantage to himself. On the other hand, it would be manifestly unjust for him to have none of the advantage, so that I should say a fair balance would be struck by his charging double his original fee, dividing the advantage with his patient.

On the whole we may say at the present time that the tendency is to lessen fees for artificial work and increase the fees for fillings, which are yearly becoming more elaborate and exhausting to the operator. Our transatlantic brethren, whom we always regard with attention, often with admiration, and sometimes with astonishment, have lately exercised us with two "booms." The first, "bridge work," is the fixing permanently in the mouth by attachment to natural roots, or teeth, bridges of metal carrying mineral crowns for mastication and appearance. Some of the cases described appear to be masterpieces of mechanical ingenuity and dexterity; whether they will eventually take rank as recognised successful practice must be left to time at present. I think the judgment of English practitioners is rather adverse, resting partly in their experience of the instability of old roots and anchored teeth as a sound foundation, and partly on their experience of the state of artificial teeth which they some times meet with, which have remained for a length of time unremoved from the mouth. The second boom is the operation by Dr. W. J. Younger, of San Francisco, California, of the implantation of natural teeth which had been out of the mouth and dry for months in sockets artificially formed by drills and reamers in the living maxillary tissues where the old alveoli of the teeth had been long obliterated. The operation was first performed in 1881, and there is no doubt that he has performed this audacious operation a great many times with unexpected success. In concluding, gentlemen, I will not occupy your time by more of my rather crude reflections than to thank you for listening to them and ask for an indulgent criticism.

Mr. HUNT proposed a vote of thanks to the President for his interesting and instructive address.

This was seconded by Mr. PEARMAN and heartily agreed to.

Mr. HUNT then read a paper on "The Physiological Action of Cocaine."

The PRESIDENT said they had listened with great pleasure to Mr. Hunt's paper. Many points were most interesting, and afforded them information they had often wished to have. Many present were perhaps experienced in the use of this drug, and he hoped they should have a discussion on it.

Mr. HUNT said he might perhaps first be allowed to add two points of practical importance. Of course the power of injection depended upon the size of the syringe. He had found in not a few cases that the tissues to be penetrated by the needle had been so firm and obstinate, and apparently impenetrable, that it had been with extreme difficulty that he had got the solution in. But he used a grand-looking syringe; it was grand, but it did not act so well as a commoner one. The barrel was so large that he could not get the solution down with the little power he was able to bring to bear. The syringe he had found most useful was one with a much smaller barrel.

Mr. COOKE PARSON said, with regard to the syringe, he had found sometimes that owing to the pressure exercised upon the gum where the injection took place, a slough appeared. He should like to ask Dr. Hunt if he had seen anything like that? Another point was with regard to the drug itself. He had found the samples vary very much indeed. Another thing he found was this, he did not know whether it was from exposure to the air or not, but he had found that a sample, after being in use some time, deteriorated. He used the drug half a dozen or a dozen times every day. He used it for all kinds of things—for putting on the gum before using the separators, as well as for extractions.

Mr. MCADAM said they were very much indebted to Mr. Hunt for introducing the use of cocaine to the profession. He seemed to always use a whole grain; others besides himself found half a grain equally efficacious. Only last Saturday he had a case in which, from the use of half a grain, the anæsthesia was complete in every way. There was usually no constitutional disturbance, but patients became very loquacious. With regard to the syringe, he thought they ought to get a syringe made specially for this purpose.

Mr. COOKE PARSON said he generally used only half a grain. On being asked what he meant by the "unpleasant symptoms" alluded to in his speech, he added: There was a dryness about the

throat, difficulty of breathing, and extreme pallor. But all that seemed to pass away with a cup of coffee, or some other restorative, and he did not take much notice of it now.

Mr. OLIVER said, a few days ago he assisted at an operation at which the surgeon brought his own cocaine solution. He had been given to understand that it was impossible to keep cocaine in solution for any length of time, on account of a fungous growth; and he asked the surgeon how he managed it. He said he put in an equal quantity of boracic acid with the cocaine, and that he then found no deterioration in the drug itself.

Mr. ACKLAND enquired whether Mr. Parson made it a rule to use half a grain? If not, upon what did he base his choice? With some patients half a grain would act more efficaciously than a grain, and he did not see why it should not sometimes be sufficient for two teeth, or even three. It depended more upon the constitution and nervous condition of the patient. But in every case he had used a grain, and had never gone below that.

Mr. PARSON replied that he had found that quantity sufficient for the extraction of one tooth. When he had two teeth—two molars, or a molar and a bicuspid—he might use a little more. He took also a rather long time in injecting. He injected on one side, and let the patient wash out the mouth, and waited two or three minutes before he injected on the other, and he always waited another three minutes before he operated.

Mr. MCADAM observed that in injecting for two teeth it was well to get the drug distributed over as large an area as possible.

The PRESIDENT remarked that the similarity of the action of cocaine to that of tobacco had made him feel confident in giving it to a person who was a smoker.

Mr. SPENCE BATE said that after Dr. Hunt read his paper at Exeter, he got the same kind of syringe he had, and used it; but he found people who put themselves under it once were not anxious to do so again. Some people said, "I would as soon have the tooth out as have the cocaine injected." For a long time he used cocaine by injection, but not with very good results. But he had latterly adopted another plan. He had taken a little carbolic acid, excoriated the gum around the tooth, then put on the cocaine, and let it stay five minutes. He found that in that way it acted very successfully, although it did not obviate all pain. He had one taken out himself in that way. He felt the tooth extracted, but felt no great pain. The preparation he used was a mixture of cocaine and menthol.

Mr. HUNT, in replying, said he could recollect only two cases in which any slough formed. One was a lady suffering already from scrofulous abscesses and a diseased bone at the knee joint. In the other case the slough occurred in a fairly healthy person, and he had no hesitation in saying it was the result of the injection. He had never used anything but the purest hydrochlorate of cocaine dissolved there and then in pure water.

Mr. PARSON said half a grain was enough, but did he always get half a grain in? His experience was that it is most difficult to inject into some parts of the mouth. Some of it might escape and he liked to have a grain, and then he had sufficient in case of leakage. Cocaine was dissolved in an instant, and was, therefore, little trouble if they had their quantities weighed out before.

A paper on "Some Surgical Conditions in connection with Dentistry" was then read by Mr. SWAIN.*

The PRESIDENT said they were very much obliged to Mr. Swain. His feeling was that deciduous teeth might be very safely removed when they were the cause of disturbance, with the exception, perhaps, of the lower canines, which seemed sometimes to help to keep the jaw expanded.

Mr. SPENCE BATE said that with regard to swallowing teeth there was a very much larger number of cases than those spoken of to-day. As far as he had read, he had never met with a case where the fault did not rest absolutely with the person using the teeth. He never knew one where a properly-made piece might not be worn with safety night or day. With regard to the extraction of deciduous teeth, Mr. Swain was not right in saying that it is the general opinion of dentists that the jaws narrow or contract because they are extracted; but the remaining teeth do change their positions as a consequence of premature extractions. He should always say keep them in as long as possible, and therefore give a child as much power of mastication as possible. He should ask Mr. Swain if in his experience when cancer arose in the mouth connected with the tongue, it was not more rapid in its destruction when teeth were extracted.

Mr. SWAIN said he believed that this was true of cancer of the jaw, but with regard to cancer in the tongue he was perfectly satisfied that the removal of decayed teeth, and even sometimes the removal of sound teeth which appeared to press on the tongue was the right practice.

* See Journal for August, page 517.

Mr. BATE said he could give a case where the teeth were removed and where a few months afterwards it seemed as if the cancer had spread from the tongue and into the jaw. In his experience he had never seen a case which did not go more rapidly when it was complicated with the wound arising from extraction.

Mr. SWAIN explained that what he meant was that in the early and merely suspicious conditions of the tongue, he had not the slightest doubt that the removal of teeth did good ; but as soon as ever cancer was established, the duty was to remove the cancer and the tongue either in whole or in part.

Mr. OLIVER then read a paper on "Popular Education in Dental Matters."

The meeting at this point adjourned for luncheon, the members present being entertained in a most liberal manner by Mr. Balkwill, at his residence in Princess Square. Upon their return the discussion was resumed by Mr. SPENCE BATE, who said there was one passage in Mr. Oliver's paper that struck him as particularly worthy of attention ; he alluded to "cheap dentistry." He believed cheap dentistry to be one of the best things that could be had, but it ought to be good dentistry at the same time. What we had to contend against was unprincipled men, who pretended they were going to do cheap things, and when they got people into their power fleeced them to the greatest possible extent. After relating two instances of dishonest practice, Mr. Bate remarked that he did not mind a man struggling at the beginning of his profession working as cheaply as possible, provided it was honestly done. What they had to set their faces against was dishonest work and not against cheap work.

Mr. OLIVER replied to the various points raised by the speakers, and concluded by saying that he believed with the President that the future was with operative dentistry, and he thought that they would do well to consider what could be done in that direction, both for the middle and poorer classes.

Mr. ACKLAND read "Notes of Two Cases of Epulis removed at the Exeter Dental Hospital," which will be found at another page.

Mr. APPERLY asked if it was always necessary to remove the teeth when an epulis grew in the anterior surface ?

The PRESIDENT mentioned a case of a small epulis in his partner's practice, in which he did not remove the teeth.

Mr. SPENCE BATE referred to a case in his practice of a young

lady for whom he had pivoted some teeth, and who after wearing them for a year or two received a blow in the mouth. She came to him with a swelling. Sir James Paget pronounced the swelling myeloid epulis. After it was taken out he put a section under the microscope and came to the conclusion it was cancerous, and sent a drawing of it to Mr. Paget; but he still said it was a case of myeloid epulis and would not occur again.

The PRESIDENT said that must be twenty-five years ago, and he could say it had not occurred again.

Mr. BATE added that a year or two afterwards he met Mr. Paget in London, and asked him if these were cancerous cells. Why did he call this epulis and not cancer, and he said myeloid epulis would not occur again; but if it had gone further it would kill. Epulis and cancer were very close congeners, but the one was capable of being cut out at its earliest stages while the other was not curable at all.

Mr. APPERLY explained that he asked the question, because six or seven years ago a lady came to him with a very small epulis. He advised her to call on her doctor, who at once took the lancet and removed it. Within a fortnight's time she called again and the epulis had then grown to nearly the size of a walnut and separated the teeth very much. He said it must be at once taken in hand and removed thoroughly. The doctor came and administered ether, and he removed it, bathed it well with carbolic, treated it well for two or three days, and there have been no signs of it since. In that case there was no need to remove the teeth, but there would have been had it spread to the sockets of the teeth.

Mr. ACKLAND said that Mr. Apperly dealt with his case in the early stage, whereas his case had been going on for about eight months. In Mr. Balkwill's case, too, he would have found that the epulis would soon have grown downwards as well as outwards, and would have got hold of the socket of the teeth. In reply to Mr. Bate, he agreed that the teeth ought to have been removed. He took a section of that growth and he thought he saw one or two myeloid cells in it, and he sent it to London to a friend, who said the same. With regard to the difference between myeloid epulis and true cancer, most surgery books now put tumours into three divisions, non-malignant, semi-malignant, and malignant. Myeloid epulis may be put in the middle division.

Mr. GARTRELL read a paper on "Crown and Bridge Work."

In the discussion which followed Mr. Cooke Parson expressed

doubt whether a plate resting partly on the ridge would, owing to the softness of the gum, be perfectly secure. The possibility of obtaining fees adequate to the labour was also discussed.

DEMONSTRATIONS.

Mr. KEYS gave illustrations of new non-adhesive for plaster impressions from the mouth. Instead of using soap and water which caused delay, Mr. Keys, immediately after the impression is taken out of the mouth, held it over an ordinary gas flame until a layer of black carbon formed upon it. Then the model could be cast at once.

Mr. OLIVER said he found that the best plan was to take the model twice. First to take a rough model and let it cool. When fairly cooled through he made the surface very soft, thus he had a solid mass which he could handle and a superficial surface which was pliable. The tendency was for the material to fly off at certain points (indicated), and he often found that plates did not fit there because the model was wrong. In cases of that kind he took his knife, cut out a wedge-shaped piece on either side. He then warmed this part of the model and closed it up again. His main point was harder than the main piece, before putting in detail.

Other demonstrations were given by Mr. T. Cooke Parson on pivoting.

Mr. F. H. BALKWILL shewed a very interesting case of a sailor for whom he had fitted a set of teeth, at the same time restoring a considerable loss of tissue in the lower lip. He also shewed a regulating case.

Mr. F. H. BRIGGS described a new method of stopping with fused enamel.

Mr. GILBERT WALKER, of London, sent for exhibition specimens of a new rubber facing, already described in the Journal.

THE DINNER.

Mr. F. H. Balkwill in the chair ; vice-chair, Mr. J. C. Oliver.

Present: In addition to most of the members present at the meeting, the Mayor of Plymouth (Alderman Waring), Rev. J. Wood, Mr. Paul Swain, Mr. Geo. Jackson and Mr. Henry Clarke.

The usual loyal toasts having been given and responded to,

Mr. PAUL SWAIN (in the absence of Mr. W. J. Square) proposed "The British Dental Association." It was, he said, a

matter of great congratulation that the medical profession and the dental profession were now brought more in contact, and he was delighted to find that as years went on there was every reason to believe that that contact would be more thorough. He was afraid he could not congratulate the members of the dental profession on their future. His friend, on the right (Mr. Spence Bate), sometime ago read a paper on the teeth of the future, and he clearly demonstrated that the teeth were a vanishing body; that the molars had already diminished, that the wisdom teeth had given us notice to quit, and that there was every reason to believe that in the course of a few millions of years—that was of not much consequence in the present rapid flight of time—teeth would altogether disappear. What then was to become of the dentist? I have every reason to believe that as time went on the lower part of the face including the teeth would be abolished; they would be all brain, and so surgeons were laying up treasure for the time to come. Brain surgery was advancing rapidly, and although they would not have the pleasure of removing upper jaws or of cutting off portions of the lower jaw, they would have a field for the future in the brain. But his dental friends would be nowhere when that time arrived. However he might congratulate them at present on being in existence with years of usefulness before them, and he most cordially proposed the health of the “British Dental Association.”

Mr. COOKE PARSON thanked Mr. Swain for the kind manner in which he had proposed the toast. There was no doubt that although theirs was a new Association, it bid fair to grow into something more important. By the Dental Acts which had been passed, they had now a recognised position; and as far as the education of the profession was concerned it was now well in hand. The curriculum of the College of Surgeons was now very nearly the same for the dentist as it is for the surgeon. For a certain distance they went together, and then branched off, each to his speciality. There was no doubt that this had been the means of increasing their knowledge, and had been of great benefit to our patients.

Mr. APPERLY also responded to the toast.

Mr. SPENCE BATE proposed “the Medical Profession.” He said that in 1815, the medical profession was undergoing a similar phase to what they (the dentists) had gone through more recently. At that time medical men held a very unsettled position not having

obtained a status. They gradually grew and united and then got an Act of Parliament, and had now become a profession which stood second to none in Europe. In order to obtain their charter, and present position, dentists had had a struggle; and throughout it they had always had the leading and best men of the medical profession on their side; and wherever there was a difficulty they always had the leading men in London and the country supporting them. Therefore he thought they could not do better than unite themselves and follow in the footsteps of that profession which had risen so high and was esteemed so universally throughout the world, and the time might come when they would be merged into one profession and know no distinction.

Mr. GEORGE JACKSON responded. Mr. Bate, he said, had referred to the difficulties the dental profession had encountered before they obtained their proper position and were acknowledged as a profession, and he stated quite truly that the medical men were in similar difficulties before 1815; but he feared the medical profession were in the same difficulty now. Although formed into a corporation they had allowed certain men who happened to have the advantages of fortune and position in London, to usurp all the powers of the corporation and to exercise them in an arbitrary manner against the bulk of the profession, who were in no way consulted as to any steps taken. He thought therefore that it would be a good thing if the dentists could unite with the medical profession to help in achieving what had now to be done, namely, that the corporation should not consist of, so to speak, mayor and aldermen, but that other members should have some voice in its government. At present such was not the case, except to an extremely limited extent. That is a matter that required consideration and was being considered by the College of Surgeons who had applied for a new charter. He thought in that matter it was quite possible they might receive some help from what he might term the sister profession.

Mr. McADAM gave "Prosperity to the Town of Plymouth." The Mayor (Mr. Waring) acknowledged the toast.

Mr. CALEB WILLIAMS proposed "the President." He said that they would agree with him that there was no member of the Western Branch of the Dental Association who was more fitted for the post than Mr. Balkwill, and the way in which he had filled the post that day augured well for his year of office. He wished

him the greatest success in his office and plenty of sport with those yellow flies.

The PRESIDENT thanked them for the hearty manner in which they had received his name. He thought it was not an unworthy ambition in a man to be well esteemed by those of his own profession. He certainly had always had the welfare of his own profession at heart and had from the first taken a great interest in the Western Dental Association, which was an Association very much needed in the provinces, where they were very much isolated and except for occasional visits to town, knew very little of other members or what was doing except what they could read. But more than that was needed and the Dental Association had met that need to a great extent.

The toast of "the Visitors" was given by Mr. Oliver, and responded to by Mr. Henry Clark.

On Saturday an excursion was made to the seat of the Duke of Bedford, Endsleigh, one of the most beautiful spots in Devonshire. The members proceeded by rail to Tavistock, and thence drove to Endsleigh, inspecting on their way the Devon Great Consols Mine, over which they were courteously shown by Captain Clemow. The mine now produces a large quantity of arsenic, and the members were regaled with the sight of an amount sufficient in the opinion of most of them to destroy all the dental pulps in existence or that ever existed.

The Annual General Meeting 1888.

THE Annual General Meeting of the Association was held this year in Dublin, at the School of Physic, Trinity College, The Royal College of Surgeons in Ireland, and the Royal University of Ireland, on Thursday, Friday, and Saturday, August 23rd, 24th, and 25th.

Although the official programme did not commence until the Thursday, and in fact the greater number of the members did not arrive until late on Wednesday night or early on Thursday morning, the hospitality of our Irish entertainers could not wait till the formal commencement of the meeting. As the Association was holding its annual meeting in Dublin this year, it was thought desirable to hold the first Representative Dinner of the Dental Fellows and Licentiates of the Royal College of Surgeons, Ireland.

A committee had been formed for the purposes of carrying out this scheme. A copy of those holding the L.D.S., R.C.S.I. up to date had been obtained from the College Register, and an invitation sent to every member. The President and Council of the Royal College of Surgeons, Ireland, very courteously and kindly placed the use of the College for that purpose at the disposal of the Committee. Accordingly on the Wednesday night some of the prominent members who had already crossed the channel experienced a foretaste of what was in store for the meeting in general in the shape of a very pleasant dinner at the Royal College of Surgeons in Ireland. It is needless to say much about the dinner itself, the name of Mitchell on the menu carte will tell its own tale. The chair was occupied by the President of the College for the present year, Mr. Henry Fitzgibbon, while among the guests present were the ex-president of the College, Mr. Antony H. Corley and others. The speeches were interesting in many respects, and we may summarise the general effect of this preliminary re-union by saying that it sufficed to show the intimate relations of mutual respect and social friendship that exist in Dublin between the purely surgical and the specially dental sections of the medical profession; this thought must have been uppermost in the minds of more than one of the English guests of that evening, but the actual expression of it was reserved for a visitor from Harvard University—Dr. Grant—who, in a very effective speech, paid his tribute to the high social standing of dentistry in Ireland.

We will not linger longer over the speechifying at this dinner, seeing that it was in a measure informal; those of us who were fortunate enough to be present will not readily forget the conviviality, the happy little impromptu speeches, the music (we had practical evidence that for Scotchmen and Irishmen at least, neither professional eminence, literary labours, nor the cares of the Association are incompatible with fine singing), in fine the general *entente cordiale* of what we may perhaps call the dress rehearsal of the annual festivities.

Thursday, August 23.

On Thursday morning the business of the meeting commenced. Mr. J. R. BROWNLIE (Glasgow), President, in the chair. The following gentlemen signed their names as having attended, in the book provided for the purpose:

Amoore, J. S., Edinburgh.
Andrews, J. S., Belfast.

Baker, A. W. W., Dublin.
Baldwin, H., London.
Balkwill, F. N., Plymouth.
Beers, W. G., Montreal.
Bennett, Storer, London.
Biggs, J. A., Glasgow.
Blandy, H., Nottingham.
Bloom, M. J., Dublin.
Broughton, W., Manchester.
Browne-Mason, Charles, Scarborough.
Browne-Mason, J. T., Exeter.
Brownlie, J. R., Glasgow.

Campbell, Walter, Dundee.
Campion, G. G., Manchester.
Canton, F., London.
Clarke, Eugene C., Bangor.
Clarke, J. C., Belfast.
Cooper, C. H., Bradford.
Corbett, Daniel, Dublin.
Corbett, Daniel, Jun., Dublin.
Corbett, J. F., Dublin.
Corbett, W. C., Cork.
Cunningham, C. M., Dublin.
Cunningham, G., Cambridge.

Dennant, J., Brighton.

Egan, L. J., Cork.
Elwood, W. H., Belfast.

Fernald, H. P., Cheltenham.
Finlayson, M., Edinburgh.
Fisher, Wm., Dundee.
Fothergill, J. A., Darlington.

Gaddes, T., London.
Gaskell, F., Dublin.
Greenfield, J., London.
Grove, R. N., Walsall.

Harding, W. E., Shrewsbury.
Harrison, F., Sheffield.
Harrison, R., London.
Hazleton, R., Dublin.
Helyar, W., Bristol.
Hepburn, D., London.
Holford, J. J., London.
Houghton, Edwin, Manchester.
Huet, F. A., Manchester.

Hutchinson, S. J., London.

Johnson, M., Chester.
Jones, A., Cambridge.
Jones, A. A., Stamford.
Jones, J. H., Manchester.

Kekwick, J. F., Carlisle.
King, R. F. H., Nottingham.
King, Roff, Shrewsbury.
King, T. E., York.
Kirby, A., Bedford.
Kluht, H. J., Bayswater.

Lennox, R. P., Cambridge.

M'Adam, G. C., Hereford.
M'Call, J. H., Leicester.
M'Clean, F., Dublin.
M'Stay, J., Belfast.
Macleod, W. B., Edinburgh.
Mallet, H., Exeter.
Mansell, T., Birkenhead.
Mason, H., Exeter.
Matheson, L., London.
Matthews, A. A., Bradford.
Moore, R., Dublin.
Mummery, J. H., London.
Murray, G. M. P., Dublin.

Neale, W. H. B., Birmingham.

O'Duffy, J., Dublin.
Osborne, G. H., York.

Parkinson, Geo., London.
Payling, R., Peterborough.
Pearsall, W. Booth, Dublin.
Penfold, W., London.
Petherbridge, J., Dundee.
Price, Rees, Glasgow.
Pritchard, J. W., Glasgow.

Read, T., London.
Reeves, S. G., Dublin.
Rhodes, W. A., Cambridge.
Richards, F. W., Birmingham.
Rilot, C. F., London.
Rogers, C., Wexford.
Rogers, R., Cheltenham.

Sandes, J. J. H., Devon.
Senior, J. W., Huddersfield.
Sherwood, M., Oxford.

Simms, W., Manchester.
 Sims, C., Birmingham.
 Small, M., London.
 Smith, A., London.
 Smith, C. M. C., Dublin.
 Smith, J., Edinburgh.
 Stack, R. Theodore, Dublin.
 Stirling, J., Ayr.
 Stocken, J., London.
 Stokes, C., Sheffield.
 Street, G. H., London.

Studley, T. F., Dublin.

Tomes, C. S., London.
 Tucker, C., Dublin.
 Tucker, J. S., Dublin.
 Turner, J. S., London.

Underwood, A. S., London.

Verrier, A. B., Weymouth.

Also the Rev. Dr. Haughton, Dr. Corley, Dr. Macnamara, and a number of other members of the Irish medical and surgical professions.

The Annual Museum was opened at the School of Physic, Trinity College, at 9 o'clock. The room devoted to it was admirably adapted for the purpose, there was every facility offered for those who wished to inspect the specimens, and the specimens themselves were of very great interest. On another page our readers will find Dr. Baker's own account of the three sections to which he was Secretary, and Mr. Murray's account of the work-room section for which he performed the same office.

Those who wish for detailed information on the subject are therefore referred to these papers where they will find the record compiled by those upon whom fell the lion's share of the labour of arrangement and classification. We cannot omit to mention, however, that here as elsewhere we detected ample evidence that the Hon. Secretary of the branch had had his finger in the pie, those delightful bottle-racks being among other things traceable to his inventive genius.

The room was divided into four sections, viz.—manufactures, literature, surgical, and work room. The surgical section contained over eight hundred specimens of abnormal teeth. Each specimen was enclosed in a little glass tube, and placed on a mahogany rack designed by Mr. Booth-Pearsall. By this arrangement all the specimens could be satisfactorily examined within a comparatively brief space of time. On adjoining racks there were numerous plaster models showing irregularities of teeth and cases of cleft palate. The apparatus used in treating cases of cleft palate were also exhibited, together with antique dental instruments, some of them dating as far back as the sixteenth century. Among other ancient exhibits there were dentures carved in ivory, dentures with natural teeth inserted in ivory, and dentures with artificial teeth set in ivory. In the Human and Comparative

Pathological Section, the specimens included a gorilla's head with a large canine tooth in the ramus of the lower jaw—the only specimen of the kind known. Casts of the bones of the *Hesperornis Regalis*, a bird with teeth, have been lent to the Association by Professor Sollas, and they find a place in the museum. The bird was only recently discovered in America by Professor Marsh, and its bones are at present in Yale College. Professor Bennett supplied a number of specimens, showing the effects of rheumatic arthritis on the jaws and teeth. The head of a pug dog occupied a place on one of the racks. The teeth of the dog were covered with tartar, and the sockets were absorbed. This never occurs in the animal in its wild state, and only a few cases of the kind have been discovered in pet dogs. On the same rack there was a tooth in the lower jaw of a marmot with odontome connected with the end of the root of the left incisor. In this section there were many curious specimens, which appeared to possess more than a passing interest even for visitors unconnected with the profession. The majority of them had been temporarily placed at the disposal of the Association by the Odontological Society of Great Britain, Trinity College, and the Royal College of Surgeons. In the workroom there were all kinds of appliances for the rapid execution of work, including the latest designs in seats, lathe heads, vices, and other requisites. On the walls of the museum there were exhibited excellent photographs by Mr. J. Howard Mummery, of London, showing the interglobular spaces in dentine, and the passage of the dentinal tubules across the spaces. Transparencies, furnished by Mr. Andrew, Belfast, illustrated various phenomena in cleft palate, and dental anatomy and pathology.

Opening out of the museum was a spacious room in which, by the kindness and courtesy of the Secretary of the General Post Office, Dublin, a temporary post office had been erected, where letters and telegrams could be received and dispatched. Stamped stationery and every other convenience was here placed at the service of members, who were just as well off in this respect as the members of a good club from 9 to 5 on each day of the meeting. Hard by was the General Enquiry Office, where from an early hour on Thursday morning enquiries, sometimes apparently more "general" than could be wished for the sake of the over-harassed Hon. Secretary, poured in incessantly. To judge from the faces and demeanour of those enquirers, who had asked "not wisely

but too well," this was a very warm corner for the unbusinesslike, always a considerable element in such a gathering.

Not far from the enquiry office was the splendid laboratory of physiological research, where Dr. Arthur Baker was able, through the kindness of Professor Purser, to show sixty-nine microscopes. This exhibition was quite unique of its kind. Mr. Charters White, of London, showed an interesting series of slides, accompanied with microphotographs of each slide, while Dr. Baker, Mr. Andrew of Belfast, Dr. Martini of Turin, and Mr. Arthur Underwood all exhibited very interesting slides. These remained on view until the Saturday.

On the Thursday and Friday a magnificent luncheon was provided in the dining hall of Trinity College, where the ladies and gentlemen of the party met at 1.30, or we should say, were supposed to meet at 1.30, for on the Friday the gentler sex exercised their privilege of being late, and while the unattached male element sauntered forth from their luncheon about half past two the married men might still be seen lingering and hungering in expectation of the arrival of the cavalcade. After the Thursday luncheon the party was photographed on the steps of the dining hall; the result being a capital group.

Meeting of the Representative Board.

THE Representative Board met in the Board-room of the Royal College of Surgeons in Ireland, on Thursday, August 23rd; Mr. J. SMITH-TURNER in the chair. The following members of the Board were present:—J. Smith-Turner, Esq., President, in the chair; Messrs. Storer Bennett, F. Canton, W. H. Coffin, S. J. Hutchinson, G. W. Parkinson, C. West, E. Lloyd Williams, and Morton Smale (hon. sec.), of London; W. Bowman Macleod and Andrew Wilson (Edinburgh), J. A. Biggs, J. R. Brownlie, and Rees Price (Glasgow), W. H. Williamson (Aberdeen), C. Sims (Birmingham), J. Dennant (Brighton), W. H. Rhodes (Cambridge), T. Cooke Parson (Clifton), H. B. Mason (Exeter), J. Fenn Cole (Ipswich), Henry Blandy (Nottingham), F. H. Balkwill (Plymouth), W. E. Harding (Shrewsbury), S. Lee Pike (Sheffield), W. A. Hunt (Yeovil), and T. E. King (York).

The PRESIDENT stated that the report of the sub-committee on the Dental Aspect of Public Health would be read by Messrs. Cunningham and Fisher at the Annual Meeting.

The SECRETARY stated that Mr. Partridge, and Messrs. Coe and Huntley, of the American Dental Institute, had been prosecuted, for using titles signifying that they were registered, and in each case had been fined £5 and costs.

The following resolution, sent up to the Board by the Scottish Branch, and supported by the Eastern and Southern Counties Branch, was considered :—"That the Representative Board be asked to approach, or take such steps as are open to them, to move the Commission appointed in connection with the Universities (Scotland) Bill, to empower the Universities of Scotland to institute a degree in dentistry. After some discussion, it was decided, on the motion of Dr. WILLIAMSON, to leave the matter in the hands of the Business Committee.

The HON. TREASURER stated that there was a balance of £766, and that 151 members were in arrears for one year, and 17 for two years.

It was decided to recommend that the Annual Meeting for 1889 be held in Brighton, and that Mr. Lee Rymer be President-elect; and that both dates—August 22, 23, 24, and August 29, 30, 31—be submitted to the meeting, for the members to select the most convenient to the majority.

Mr. W. BOOTH-PEARSALL, the Hon. Secretary of the Irish Branch, arriving at the meeting, was received with applause. He, in the name of the President and Council of the Royal College of Surgeons, welcomed the members to the College.

A case of infringement of Act, sent up to the Board by the West of Scotland Branch, was, on the motion of Mr. West seconded by Mr. HUTCHINSON, referred to the West of Scotland Branch, to be dealt with, permission being given for that Branch to prosecute, if necessary.

The following members of the Association were nominated to be recommended to the Annual Meeting for election to the Representative Board, in the place of those who retired by rotation : For London : Messrs. J. Ackery, W. H. Coffin, J. Fairbank, W. Hern, and A. J. Woodhouse. For the Provinces : Messrs. J. A. Biggs, W. Campbell, J. H. Fothergill, B. Neale, J. H. Redman, and Theodore Stack. The name of Mr. E. S. Ash, of Dublin, was received as having been elected by the Irish Branch.

The following gentlemen were elected members of the Association :—Messrs. T. Headridge (Leeds), T. A. Tait (Tenterden), and F. M. Taylor (Liverpool). The election of one gentleman was postponed until the next meeting.

Mr. DENNANT said that in view of the increasing growth of the Association and its multifarious interests, he thought steps should be taken to facilitate the business of its annual meetings, and he would give notice that he would move the following resolution at the next meeting of the Representative Board:—"That in future at the annual meetings of the Association, readers of papers or communications, or abstracts thereof be limited to 15 minutes, and that speakers thereto be restricted to 7 minutes; and that copies of such papers and abstracts be forwarded to the Hon. Secretary of the Representative Board at least twenty days prior to the date of meeting, for the approval of the Board."

The Business Meeting.

The chair was taken by Mr. J. R. BROWNLIE, L.D.S.Eng., the outgoing President.

The PRESIDENT said I have much pleasure in opening this meeting by calling on Dr. Haughton to say a few words.

Rev. D. HAUGHTON, S.F.T.C., F.R.S., said: Gentlemen, members of the British Dental Association, I am instructed by the Provost of Trinity College to explain his regret at not being able to receive you in person to-day; but he appointed me his deputy, and said that whatever I chose to say to you in the way of welcome he would heartily endorse. Therefore you will understand that I speak in the name of the Provost of Trinity College and not merely as an individual to-day. I told the Provost that I was rather a dangerous person to act as his deputy, because sometimes things come into my head that may be ought to have stayed out of it, but so sure as ever they come into my head they come out of my mouth, and I reminded him of what he, as a Biblical scholar and great divine, knew much better than I did, the story of Baalam and his ass. I said: "Provost, remember that you are appointing an ass to speak in your place," and I quoted for him the words of the clever French play, based on the story, in which Baalam listens for some time most attentively to what the ass is saying and at last exclaims, "Good God, my ass speaks, and hang me but he speaks right well." And I am sure that I speak right well to-day, when I say that in the name of the authorities of Trinity College, I am instructed to give you a most hearty welcome, and to throw open to you everything in the College that is to be seen. I understand that Professor Fitzgerald has undertaken to show the

treasures of the library to any lady or gentleman who may wish to see them. I am quite sure that Dr. Reynolds, our Professor of Chemistry, whom I see present, will show everything in his department to the visitors who wish to see them. Professor Purser, though absent, has placed all his microscopes and resources under the direction of the Secretaries here, who will show everything in that department ; and I may say that you will see for yourselves at our luncheon arrangements to-day, and to-morrow in the Dining Hall of Trinity College—those of you who dine at the College to-morrow—that everything that it is in our power to give has been placed at your disposal. So far as Trinity College and your Reception Committee are concerned, I think you will admit that we have done our best. There is, of course, one drawback—a falling barometer this morning—but as far as I can make out the rain wont come till to-morrow morning, and your excellent President, Mr. Corbett's Garden Party, will be a most brilliant and happy success, weather included. However, we have made arrangements, in case heavy showers do come, that the Engineering Museum and the Library will be thrown open during the showers ; but I hope that the greater part of the afternoon will be spent in the open air. Again, gentlemen, I heartily wish you welcome in the name of Trinity College.

The PRESIDENT then called upon the Hon. Treasurer to read his report.

Mr. FREDERICK CANTON : There are, I regret to say, 151 members one year in arrear with their subscriptions, and seventeen are two years in arrear. Our balance is £766 12s., which is a very satisfactory one. At the same time I have not yet got in the law costs of the recent prosecutions ; and the last defendant has given notice of appeal. If necessary, we shall have to carry that case to the House of Lords, which means a considerable expense, therefore I would ask members to let us have their subscriptions as soon as possible in order that we may know what balance we have to work with.

Dr. WALKER said he had pleasure in moving the adoption of the Treasurer's report.

Mr. BRUNTON seconded the motion, which was unanimously agreed to.

Mr. MORTON SMALE, Hon. Secretary, read the following report :—

The report which your executive have to present to you for the

past year is one of exceptional interest. We venture to hope the members at large will feel gratified with the progress made, and realize more fully how important a factor in the well-being of our profession the Association has become.

The various Branches have been unusually active, and many important meetings have been held at various centres, and new ground broken up. The Irish, the Midland, and Eastern Counties Branches particularly deserve the thanks of the members for their good work.

The following paragraph in last year's report has been realized : "A case which has been considered very fully at various times both by your Board and Business Committee, has recently occupied a very public position, and although it has been again successfully contested against the Medical Council, the Master of the Rolls, in his summing up, pointed out a course at once dignified and efficacious for the removal of individuals so implicated from the Register ; it is hoped that the Council may see its way to act on his suggestion." At the instigation of your Business Committee and the Royal College of Surgeons in Ireland, Mr. Partridge's name was erased from the Dentists' Register for unprofessional conduct. As subsequent to such removal he continued to use both the title of dentist and the letters L.D.S. in connection with his name, our solicitors, Messrs. Bowman & Crawley-Boevey, were directed to take proceedings against him, with the result that he was fined £5 and costs. Earlier in the year a Mr. Bradley, of Wisbech, was prosecuted, and also fined £5 and costs for calling himself, *viva voce*, a dentist. This was new ground of prosecution, and established a new precedent. Two gentlemen connected with the American Dental Institute, have also been subjected to legal proceedings, their names not appearing on the Dentists' Register ; but, inasmuch, as they held the American diploma D.D.S., this also was a novel proceeding. They, like Mr. Bradley, were defended by Mr. Waddy, Q.C., and the magistrate took a week to consider his judgment. On Tuesday last he delivered it to the effect that they also should be fined £5 and costs. Making, therefore, three successful cases of prosecution during the year. The defendants have appealed to the magistrate to state a case for the opinion of the Court of Queen's Bench, and the leave has been granted ; we are, therefore, launched into serious and costly legislation, and your executive relies upon every man to do his duty, and give all the support in his power, to those whose duty

it is to carry this case, it is hoped, to a successful termination. Your Business Committee took steps to get these cases reported in the daily Press, with a view to educate the public on the question of the status of our profession. During the year many cases of alleged infringements of the Dentists Act have been reported to your Honorary Secretary, and the Association has been successful, in no less than 10 cases, in causing the offenders to either cease practising altogether or to forego the assumed designations.

The list of members has been considerably elaborated, and as it must serve the convenience of everyone connected with the British Dental Association, your executive hope that the members individually will assist in maintaining it in its present state of efficiency, and where it can be improved help to improve it. A geographical Register has been prepared, probably it may prove more useful when the next Register is published, but up till now it does not seem to have been so much used by the Branches as it might have been. Your committee, supported by the West of Scotland Branch, took steps to prevent any exhibit of dental specimens at the Glasgow Exhibition; unfortunately we were not so forward in regard to one of the foreign exhibitions in London, and one of those disgraceful exhibitions of a dentist's workroom may be seen in working order; fortunately it attracts little notice.

One member of the Association, who had been guilty of somewhat involved and doubtful relations with an advertising institution, has been requested to resign, and he has since been reproved by the Council of the Royal College of Surgeons in Ireland, of which body he held the L.D.S., it is hoped he may see his error, mend his ways and rejoin the Association.

At the suggestion of the Business Committee the secretaries of the Branches have been elected members of that body by the Representative Board; but the privilege, up to the present time, your executive regret to say, has been very little appreciated, only one has attended and he only at one meeting.

The Journal continues to hold its high position amongst dental literature, in addition to being also the mouthpiece of the Members individually, and the Association. Mr. Arthur Underwood, the sub-editor, is to be congratulated on the able way he has fulfilled his duties.

The Association will be glad to hear that the authorities of

Guernsey have passed an ordinance prohibiting in future any one practising dentistry in that island without being in possession of a diploma as L.D.S. from either England, Scotland, Ireland, or France.

The Representative Board has held its required number of meetings, and the Business Committee has met 14 times, its sitting usually lasting three or four hours. The numerical strength of the Association has, thanks to the activity already referred to, largely increased. The number of members last year was 645, while to-day it is 750, showing an increase of 105. Ten members have been removed for non-payment of subscriptions, against nine last year, and there have been four deaths; the actual number of new members, therefore, during the year has assumed the grand total of 121. Many members of our profession have held aloof from the Association for the reason that your executive have exhibited great discretion in the matter of prosecutions, never during the nine years of its existence having suffered a defeat, demonstrating very clearly how well it has at all times been advised. It is to be hoped that those who, for the above reason, have not joined us, may in the light of the recent litigation see their way to throw their lot in with us, and help us by their presence and their purses—with the former, for unity is strength, and with the latter, for legal proceedings are expensive.

The best thanks of the Association are due to the Council and enthusiastic and active Secretary of the Irish Branch, for the very admirable meeting they have organised. A meeting that must do much to attract outsiders to our ranks, and raise our profession in the eyes of the general public, and place our Association on a sounder scientific basis. Your executive would finally wish to appeal to every member of the Association to resolve during the year to bring two recruits into our number, in order that at the annual meeting in 1889 it may be able to chronicle an even larger increase.

Rev. Dr. HAUGHTON remarked that the case of Mr. Partridge, which was mentioned in the report, came before the General Medical Council, and the sympathies of that Council were completely with the Dental Association in the matter. But the decision to which the General Medical Council came, was, greatly to the astonishment of the President, Mr. Marshall, set aside by the Master of the Rolls. He (Dr. Haughton) was in London at the time, and Mr. Marshall asked his opinion and

that of others as to whether or not a special meeting of the Council should be called on the subject ; but they agreed that it would be better to wait until the meeting of the Council in November next. Of course proper steps should be taken by the Association to bring the matter before the Council then.

Mr. BOWMAN MACLEOD said he had very much pleasure in moving the adoption of the Secretary's report. They had very much reason to congratulate themselves, not only on the increase in the number of members of the Association, but also on the work that was being done. Emperics and quacks were being weeded out as far as possible ; and although the number of persons so dealt with had not been great as yet, and the moral effect of the prosecutions could not be comprehended at present, still he had no doubt that good results would be seen in the course of a few years.

Mr. ROGERS seconded the motion which was unanimously carried.

The PRESIDENT : We have now to fix the place for the annual meeting in 1889. The matter has been before the Representative Board, and I think the Secretary will have something to tell us in this connection.

Mr. SMALE : An invitation has been sent to the Association from the Southern Counties Branch asking us to hold the annual meeting for 1889 at Brighton. This was before the Representative Board this morning, and they recommend that the invitation be accepted. It is also recommended that Mr. S Lee Rymer (Croydon) be elected President for that year. As to the date of holding the meeting two dates have been discussed—one, the 22nd, 23rd, and 24th of August, and the other the 29th, 30th, and 31st of the same month.

After some discussion the earlier dates were adopted.

Mr. DENNANT : As representing the Southern Counties Branch proposed Mr. Rymer as President for 1889. Anyone acquainted with the progress that has been made in dentistry knew what a strong force Mr. Rymer's name had been in connection with it for the last thirty years.

The motion was seconded by Mr. Browne-Mason, and unanimously agreed to.

Mr. SMALE said in reference to the alterations in the Representative Board, the five topmost names on the list of representatives for London retired, but two of them were recommended for re-election namely, W. H. Coffin and A. J. Woodhouse.

For the provinces five names came off : and in addition Mr. T. E. King had become an ex-officio member of the Board, as President of the Midland Counties Branch. In the place of these gentlemen the Board recommended Messrs. J. Ackery, W. H. Coffin, J. Fairbank, W. Hern, and A. J. Woodhouse to fill up the vacancies on the London list. For the provinces : Messrs. J. A. Biggs, W. Campbell, J. H. Fothergill, B. Neale, J. H. Redman, and Theodore Stack were recommended. If any gentleman wished to propose any other member or members of the Association in the place of those recommended by the Representative Board now was the proper time for him to do so.

It was recommended by the Representative Board that the following alteration should be made in byelaw 7, viz., that the words Vice-Presidents be inserted after the words President-elect.

On the motion of Mr. BROWNE-MASON seconded by Mr. DILCOCK of Liverpool, it was unanimously resolved that the recommendation of the Representative Board as to these names be adopted.

The PRESIDENT : We have now to receive reports from sub-committees on Dental Aspects of Public Health.

Mr. CUNNINGHAM read the following report :—

The special committee appointed by the Representative Board to carry out the resolutions passed at the last Annual General Meeting, with regard to the "Dental Aspect of Public Health," beg to submit the following report :—

It was felt that in the event of the authorities seriously considering our proposals, we should be in a position to inform them as to the probable cost of any such public dental appointments we were prepared to recommend, and also what amount of professional service might be reasonably expected for such expenditure.

As the result of the examination of the mouths of the recruits entering the Army, we may take it that on the average each army recruit would require the following operations, to reinstate the efficiency of his dental armature :—Two extractions, four fillings, scaling, and gum treatment. As the carious cavities and the necessary operations will be, for the most part, simple, it is calculated that an experienced operator should perform these operations in about one and a half hours. Allowing 265 working days to the year, with an attendance of six hours a day, it is calculated that a surgeon dentist could attend efficiently to four men per diem,

which would thus give an annual total of 1,060 mouths put in order. If, on admission to the ranks, the teeth of all army recruits were thus put in a state of efficiency, and proper attention was given to their being kept in a state of cleanliness, the subsequent dental treatment necessary to maintain that efficiency would not be very great, if periodical dental [examinations were made. Probably the Army Surgeon-Dentist could efficiently attend to eight men per diem, giving an annual total of some 2,120 mouths per annum.

With regard to the Navy, we have not the same reliable data on which to base an opinion, but inasmuch as the naval recruit is younger, and the severity of the examination of the teeth is much greater, than in the Army Recruiting Department, the average attention per recruit would be less than in the case of the soldier. This view is borne out by an investigation of the work done at the Dental Hospital for the recruits sent by the London Naval Recruiting Department. A Naval Surgeon-Dentist, then, might be expected to make more recruits efficient, and maintain the efficiency of a greater number of sailors than his army confrère.

Marines and artificers as recruits would, however, be found to have mouths in a similar condition to that of the army recruit. The Committee will be glad to receive statistics of the amount of work done, with the time required, and cost of executing the same, from holders of dental appointments to hospitals, schools, &c.

The President of the Southern Counties Branch determined to take advantage of the fact of the last annual branch meeting being held in so important a military and naval centre as Portsmouth, to call attention to this important subject; he therefore invited one of the members of our Committee to move a resolution on the subject. The following resolution was therefore unanimously adopted—"That this Association is strongly of opinion that, in the interest of the State, some provision should be made for attention to the teeth of our soldiers and sailors, and that the special committee appointed by the British Dental Association for that purpose be encouraged to bring the matter urgently before the proper authorities."

The words in which Surgeon-Major Crowe, of the Army Medical Staff, seconded the resolution, are worthy of being specially noted, as, no doubt, it is good evidence that the apparent callousness, or indifference, of the administrative medical officers at head-quarters

is not shared by all the executive officers of the Army Medical Department. He said that the question was one of great importance. He had served upwards of twenty years in the army, and his experience as a soldier fully supported the views of the mover of the resolution. Many a soldier was invalided owing to ill-health caused by defective teeth, and he considered that if the British Dental Association would bring such pressure to bear on the authorities as would induce them to give the soldier proper attention, the Association would prove a good friend to the soldier.

Abroad, particularly in the West Indies and India, soldiers suffered much from decayed teeth, and were practically without assistance. Medical officers in the army were not required to know anything about dentistry to qualify them for a commission, and as they got no training while in the service, the soldiers received no attention. The only dentistry he had seen in twenty years was the extraction of teeth; as to stopping teeth, he had never attempted it, and had never seen it attempted. He therefore seconded the resolution with pleasure.

After carefully considering the whole matter, both as it related to the army and the navy, the committee determined, in the first instance, to approach the naval authorities, which they accordingly did, in the following memorial :—

40, LEICESTER SQUARE, LONDON, W.C.

April 30th, 1888.

TO THE LORDS COMMISSIONERS OF THE ADMIRALTY, WHITEHALL.

MY LORDS,—At the last Annual General Meeting of the British Dental Association held in Glasgow, on the 19th August, 1887, resolutions were adopted to the effect that the members present were unanimously of opinion that the present provisions made by the Government for the supply of dental assistance to the men of the army and navy are inadequate.

The following resolution passed at the time bears more particularly on the object of this memorial :—

“That considering the great advantage arising from the possession of sound teeth, especially in the case of men in the army and navy, the Representative Board should suggest to the Government the desirability of making suitable provision to that end.”

In pursuance of these resolutions the Representative Board of the British Dental Association, appointed a sub-committee, to consider the question, and to draw up a report, and after the adoption of that report they respectfully desire your lordships' favourable consideration of the subject as far as it applies to Her Majesty's Navy.

1. They are acquainted with your lordships' memorandum issued for the guidance of recruiting officers in the London district, by which the number of absent or defective teeth, which would disqualify a candidate, is extended from five to seven.

2. They have reason to believe that the arrangement entered into by your lordships, in December, 1885, with the authorities of the Dental Hospital of London has proved so far satisfactory.

3. They beg also to call your lordships' attention to the fact that neither in the present medical curriculum, nor in the course of special training at the Royal Hospital, Haslar, is there any provision made for efficient instruction in Dental Surgery, and that more than an elementary acquaintance with the subject is necessary in order to advise your lordships to the best effect as to how far dental surgery may be able to assist in promoting the efficiency of the navy.

They therefore respectfully beg your lordships to allow a dental practitioner, selected by them and approved by your lordships, to examine the recruits passing through the London Recruiting Depot, to collect statistics as to the condition of their teeth, and to report to your lordships thereon, in the hope that his observation may be of use in increasing the number of recruits available for the service, and thus promoting the efficiency of the Royal Navy and the Royal Marines.

Herewith we beg to enclose copies of the publications of this Association, bearing on this subject, and to state our readiness to appoint a deputation to wait upon your lordships, in the event of your desiring further information, before acceding to our proposal.

We have the honour to be, my lords,

Your humble and obedient servants,

ENCLOSURES :—"Dentistry and its Relation to the State," by George Cunningham, B.A. (Cantab.), L.D.S.Eng., D.M.D.Harvard.

"Compulsory attention to the Teeth of School Children (the Army and Navy)," by W. Macpherson Fisher, L.D.S.Eng.

"Compulsory attention to the Teeth of School Children," by W. Macpherson Fisher, L.D.S.Eng.

"The Dental Aspect of Public Health," by George Cunningham, B.A. (Cantab.) L.D.S.Eng., D.M.D.Harvard.

In response to which the committee received the following reply :—

M.D., 88/20/5.

ADMIRALTY, 23rd May, 1888.

SIR,—I am commanded by my Lords Commissioners of the Admiralty, to acknowledge the receipt of your memorial (with enclosures) dated the 30th ultimo, requesting permission for a dental practitioner to examine the recruits passing through the London Depot, and, in reply, I am to acquaint you, for the information of the Representative Board of the British Dental Association, that their lordships are

advised that no benefit would accrue to the recruiting of men and boys for the Navy by the adoption of this proposal ; and that the arrangements at present in force provide for all the requirements in the matter.

I am, Sir, your obedient servant,

EGAN MACGREGOR.

MORTON SMALE, Esq., *Hon. Sec. B.D.A.*,
40, Leicester Square.

The Committee having duly considered that reply, are of opinion that before proceeding further in the matter some direct personal influence must be brought to bear before it endeavours to obtain a reconsideration of the memorial.

The Committee are desirous of calling prominent attention to the fact that the request of the memorial was of the most modest description since it contained no substantive proposition, but merely asked the means of confirming the information which we already possess, although not to such degree and in such detail as we consider necessary. It is also worthy of record that this proposition for facilities to report would not have involved the authorities in any expense, and therefore this refusal is all the more incomprehensible.

The Committee think it desirable also to call prominent attention to the fact that whereas during the year 1886 forty-nine men and boys were treated under the Admiralty contract with the London Dental Hospital during the first seven months of the current year the number has increased to over ninety. Such facts speak for themselves, and seem to show that the position of the Lords of the Admiralty on this question is, to put it mildly, an erroneous one, and very unsatisfactory.

The Committee feel, therefore, that they must appeal to the individual members of the Association to use their personal influence to promote in every way some expression of public opinion on so important a public subject.

It is extremely desirable, therefore, that since this question is one of public rather than professional concern, efforts should be made to induce the Press to take up the question and thus give it the prominence which is essential to its recognition.

The Committee have had also under discussion the question of attention to the teeth of school children, and as the subject is one of such great importance they have requested Mr. Fisher, of Dundee, to make a special report on the subject.

Mr. FISHER, of Dundee, submitted the following report :—

It is the desire of the sub-committee appointed on this subject

that the Branches of the Association should tabulate the conditions of, and the amount of decay in the teeth of the school-children in such schools as the parochial or workhouse; the industrial, which also embraces the training-ships and reformatories, and the orphan schools. These would be sufficient schools to commence with, though I think, where it is possible, the children in Army and Naval Schools might also be embraced in the foregoing.

The object of this tabulation would be for the Association to lay before the directors of these schools the unsatisfactory conditions of the teeth of the children under their care. If this dental neglect was then to continue—in the case of parochial and industrial schools—the Association might possibly have a grievance some day to bring before the Local Government Board and the Home Office, who spend so much money on these schools respectively.

To obtain this tabulation the Association must provide books of similar pattern for the branches. I would therefore ask that this Annual Meeting sanction the expenditure by the executive of £10 for the printing and circulating of case-books to the branches.

Mr. FISHER thereafter drew attention to the need of lessons in school-books on the care of the teeth, and thought that the Association might endeavour, either through the educational commissioners or publishers, to attain their ends. At the Congresses of the Sanitary Institute of Great Britain he also thought it would be desirable if some of our members would read papers on the necessity of mouth hygiene.

Mr. FISHER added that the meeting would have to say whether they would sanction the expenditure referred to in the report for books to be sent to the branches. Again, they were badly in need of members who would volunteer to read papers at the annual congresses which were held round the country.

The proposition with reference to the grant of £10 having been seconded, was carried by acclamation.

The reports of Mr. Cunningham and Mr. Fisher were formally received.

Mr. SMITH-TURNER said they had a large amount of business to get through, and first of all they had to record their thanks to the Corporations and individuals who had made their visit to Dublin possible. He had, therefore, to move that the thanks of the Association be given to the Provost and Senior Fellows of Trinity College, Dublin, to the President and Council of the Royal

College of Surgeons in Ireland, to the Chancellor and Standing Committee of the Irish University—he believed some of the representatives of these Corporations were present, and he hoped they would convey to their associates the cordial way in which the Association had received the mention of their names: and to the Earl of Howth for the use of his pavilion for the excursion on Saturday. They had also to record their thanks to Mr. Booth-Pearsall, to Dr. Baker, and the Museum Committee, to Dr. Stack and Dr. Hazleton and to the demonstrators and readers of papers. The work of these gentlemen spoke for itself, and he could only say that he had much pleasure in proposing a formal expression of the thanks of the Association to each of the individuals and Corporations named.

Mr. KING seconded the motion, which was carried.

The Rev. Dr. HAUGHTON having briefly responded on behalf of Trinity College, and Dr. RAWDON MACNAMARA on behalf of the College of Surgeons,

Mr. BROWNIE then delivered the following valedictory address:—

We have now all but completed another year of the British Dental Association. The books have been closed, the balance has been struck, and the report is in your hands. A critical investigation may shew that there are items to both the profit and the loss side of the account, but your acceptance of the report decrees the fixedness of the result. The period for effort is over, and it only remains for me now formally to hand over to the successor you have appointed, the honourable office with which you invested me a year ago. With him begins another year, my connection is with the year that is past.

Without doubt one steps down from such a pedestal with very mixed feelings. Looking back may be fraught with some degree of satisfaction, but the past too often includes matter for unavailing regrets. There is the inevitable feeling of what "might have been," as compared with what "has been." There is the experience which has been gained, only to be stored away, for possible use in the far distant future. But there is a feeling of relief too, in thus escaping from harness. Some degree of responsibility is removed, though I am far from disposed to speak of this office, as in any sense a burden. Its duties may be said to be measured by the holder's interest in the Association and his disposition to help forward its work. All that a president can do he may do, in the way of promoting its interests, but as "kings can do no wrong"

no more can he. The president of such an association is not long in realizing that the poet's boast on behalf of the river, applies equally to the British Dental Association, and its chief offices. It too can say that

"Men may come and men may go,
But I go on for ever."

The office is permanent, the officer has but time to realize his position, ere it becomes the possession of his successor.

Still, it would be difficult to imagine that promotion to such a prominence in the Association did not give rise to a more than usual interest in its affairs on the part of the nominee. What president could fail to experience as lively an interest in the events of his year, as if he himself were responsible for them, or what member of this Association named for the office could look forward to his term without experiencing the desire that his year should include some notable event, some prominent landmark in the history of the British Dental Association? Only the smallest modicum of satisfaction could be extracted from being able to hand over his charge to his successor with nothing written off in name of depreciation or bad debts.

Whatever estimate we may severally have formed of the past year's proceedings, it will generally be conceded that it has been a markedly progressive one. We have had our troubles, but they cannot be said to have exceeded the average. The Hon. Secretary has told of the work accomplished, and for the amount of movement the friction has not been excessive. With new machinery bearings may get a little heated, and although we may have had to notice a rise of temperature here or there, the increase cannot be said to have exceeded the degree compatible with a state of vigorous exercise. Nothing certainly to interfere with the due discharge of its duties, or to prevent the British Dental Association taking deeper root and spreading its branches further into the length and breadth of the land.

To the passing year belongs something of an historic interest. It has witnessed a new departure in the development of this Association. For the first time in its history we have met upon Irish soil, and on the invitation of an Irish Branch to hold our annual meeting.

I can claim no active part in the formation of this the latest addition to the number of Branches, but I shall carry away with

me, as the happiest memory of my tenure of office, that it fell to my lot to preside over this first gathering of the British Dental Association called together on Irish soil; the first, and—we will hope—the beginning of many happy re-unions by which the importance, the influence and the resources of the British Dental Association cannot fail to be greatly augmented—no longer in name only but in very deed the British Dental Association. Unlike the wise men in “another place,” *we* have solved our Irish question, and Ireland no longer blocks the way. Indeed, our Irish brethren have taken this matter up with such characteristic enthusiasm that they make us to doubt whether they or we are the better pleased at the consummation of so desirable result: that community of interests and aspiration has at length been recognised, and that we have agreed to work in harmony for the accomplishment of those ends, which our knowledge of the subject shews us to be for the best interests of the profession and of the public. Certain it is that the welcome which our Irish brethren have prepared for us, and the arrangements entered into for the furtherance of the work of the Association, cannot but inspire the very happiest anticipations from the formation of an Irish Branch, which is so happily representative of unity, nationality and progress.

Within its first decade the British Dental Association has now formally entered upon and occupied the whole of the home territory; and unless the hint of a year ago is to bear fruit, and we are to become enriched with Colonial possessions, we must now recognise that progress by way of territorial aggrandisement is over. That our base of operations has now reached its limit, and attention must be directed rather to the full development of the resources we now possess. We have attained to representation in the three divisions of the Kingdom, and it remains for the British Dental Association to make good its claims to the position it seeks to occupy, and the influence it hopes to exert in other directions; in the discharge of functions which are capable of affording ample scope for all its energies.

To have attained to representation all over the country, is indeed a fit subject for congratulation. Without such a base of operations this Association could but advance a partial and imperfect title. It would be still more satisfactory if we could, without exaggeration, claim to be advancing in another direction—a direction in which it is very desirable we should be making progress.

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But I go on for ever"

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Still, it would be difficult to find content to be mere spectators, and usual interest in its affairs, and to their duty in regard to it. The president could fail to find their aid in the establishment of order of his year, as if he would that it were so, and that the member of this Association. But there are still estimable members of our ward to his term, able of doing credit to it, and who are training should include their footsteps--doing all they can to make the history of their education and special training, that these sons modicum of their power on behalf of the individual, and just hand over their power on behalf of the profession to which they belong name of their power on behalf of the profession to which they belong

What year's mark is being loaded, yet giving no heed to what should be the consideration—the seaworthiness of the ship itself. Nay, they may be described as loading with the knowledge of serious defects in the vessel's composition. Such members of the profession appear to be leaving to these sons and successors, to continue a struggle—which a little effort on their part might lessen or render unnecessary—and to win social position apart from their calling; unless, indeed, others should see fit, and prove competent to stem the tide.

What proportion of the names on the Dental Register ought also to appear on the roll of members of the British Dental Association we can but guess at from our own knowledge of the material in question. We are not ambitious of equalling that too bulky list. We don't want them all. We are better without a very great many of them, for we have to deplore that this Register which was designed for a much better purpose, should have been marred in the very beginning by so much inaccuracy and misrepresentation.

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tion. That an instrument intended to be a trustworthy guide should have been by extraneous influence converted into a means of setting forth fraudulent claims and of creating the new distinction for the charlatan of "registered dentist." Such things are disappointing, but they are not fatal. We can afford to give them due weight, for the account has been more than balanced by the substantial gains of the last ten years. We need not yet be counting our gains, it is too soon ; but it is equally premature to be growing impatient of results. Doubtless the work would have been better done and more complete had our ranks been filled up as they should have been by those still standing aloof, those who require to be told that their present attitude is not merely a loss to the cause of the British Dental Association, but a distinct gain to the enemy ; reputable practitioners, who are not also members of this Association, must form the very backbone of the forces with which we have to contend. Whether they mean it or not, without the support which their present attitude affords to the opposition our work would be easier. The Dentists' Register has not proved the fortress we thought to raise, but here is a citadel which we may render impregnable, here is a Register of which we have the absolute control, resting not upon a legal view of the scope and interpretation of an Act of Parliament, but founded upon the estimation in which his fellows hold each man's claim to belong to the dental profession. We can but invite and urge upon all who are interested to make use of it. We know that it could not quite take the place of the other, but it would serve to draw a hard and fast line of demarcation between those who are and those who are not of the dental profession. It would materially add to the power of the executive to cope with its difficulties, and it would provide a lever which the friends of the profession would know how to use as occasion might serve.

The British Dental Association has never, that I know of, been described as exclusive or over-exacting in respect of its admission of members. Some may say that its doors are rather too wide open to please them ; that under more stringent regulations they might have seen their way to take part in it. Well, it may be so, but the certainty of it would not now lead to change in this direction, and we may commend it to the serious consideration of all such that there may be danger in seeking to wait for—in refusing to move without—the improbable. They seek to remain indifferent, or they think still to keep neutral, but it seems to me that the

period is approaching when the profession will be divisible into two main sections ; a time when a respectable neutrality will become harder and harder to maintain, and the man who does not choose to associate with his fellows, may have to be content to be classed with men so bankrupt in *status* and reputation as to be unfit for the membership of an Association whose very vitality is dependent upon the largest possible membership.

For its future we may well predict for the British Dental Association much greater things than we have seen in its past. An association which is concerned with all its interests—its politics, its science, its social relations—must grow with the growth of the profession which has called it into existence. While our art continues to commend itself to suffering humanity—while it continues to add to its resources, and develop its powers—the necessity for such an association will continue to grow. The progress of the Association will be most apparent in the growing length of the roll of its members. Its progress will be most real in the increasing number of its Branches. The test of time is being applied to its fitness to cope with the work it has undertaken, and it begins to be evident that its power for good will be in proportion to the number as well as the efficiency of its Branches. Do we quite realise that Branches are not—need not be—mere echoes of the parent society? That they have functions to perform, and opportunities for work, which the parent society cannot exercise, and does not possess? This is not a case in which numerical strength and efficiency go hand in hand. Weeds grow apace, and the most close and constant supervision is wanted to keep them down. For such work we want Branches—more Branches ; strong Branches if we can, but many—and many rather than strong. Huge districts may mean—probably do mean—less perfect supervision ; and how, for instance, is the purity, the rescue of the Dentists' Register to be attained, unless such work be thoroughly well done? Let our Branches be fully awake to the importance of their trust, to the extent of their opportunity. Let the districts be kept within workable limits, that local officials be not burdened. Let Branch officials understand that they are expected to be able to give an account of the pretensions of everyone claiming to practise our art in their respective districts. Then will the British Dental Association more fully grasp the situation, and be more adequately prepared to encounter those powers for evil against which it seeks to make a stand. Let us look to perfect our arrangements. The

work to be done requires attention, and efficient organisation. It will require some effort, but if we will, the issue need never be in doubt.

A vote of thanks to the outgoing President having been proposed by Mr. CLARKE, seconded by Dr. HAZELTON, and carried by acclamation, Mr. BROWNLIE briefly replied.

The minutes were then read and confirmed.

The President, DANIEL CORBETT, M.R.C.S., L.D.S.Eng., then took the chair amid applause, and delivered the following address :—

The first duty I have to discharge is, to me, a most agreeable one ; it is to thank on the part of the Irish Branch of the British Dental Association, those numerous friends who, at considerable inconvenience, have come to honour us with their presence here to-day.

My native language enables me to compress into one phrase a volume of utterances, and, with all sincerity I use it, when I bid you all a “caed mille failthe.”

Before entering more directly on the subjects personal to myself, as regards the observations I am expected to make at this meeting, I feel I should be guilty of a sad dereliction of duty were I to omit this opportunity of calling your attention to the museum we have arranged for you ; its volume and variety must suggest the amount of trouble spent in the collection and classification of the different articles comprising it. With this labour and its highly successful result, I must couple the names of Wm. Pearsall, Theodore Stack, and Arthur Baker, to whose untiring industry and indefatigable exertions, we must attribute the interesting collection this day provided for your intellectual repast.

The monitor of my existence reminds me the time is near at hand, when I must resign the active duties of professional life, and seek in quiet and repose the necessary preparation to surrender to that Wise Dispenser of all good, those talents and abilities He has confided to my trust, in order that I might, with His assistance, develope them to His greater honour and glory, when with me “Life’s fitful fever shall have ended, and I have shuffled off this mortal coil.”

The year 1888 will be memorable amongst the archives of our profession, as that in which the British Dental Association held its first meeting in Ireland under the presidency of an Irishman who, at the same time, occupied the presidential chair of the Odontological Society of Great Britain.

Gentlemen, I should be more than human, were I not proud of the position I now occupy amongst you, when I recall the names of my predecessors in office, viz., Tomes, Saunders, Cartwright, Parkinson, and other professional celebrities well known to you all. I must not, however, allow my pride to master my gratitude to my professional brethren, through whose instrumentality I have been placed in my present exalted position; if I except my long professional life, I look in vain for evidences of such merit as should justify their selection of me as their president. When deliberating as to what should be the nature and tone of my address to you on this important occasion, it occurred to me that a brief retrospect of my early professional career might not be altogether devoid of interest, and a concise narrative of the many difficulties I had to contend with and overcome, prove to the younger members of our Association an incentive to vigorous action on their part in the pursuit of knowledge, and illustrate more forcibly the progress our profession has made in the present century.

Gentlemen, as the son of a self-educated dentist, I this day appear before you. "Fair Science frowned not on my humble birth," but necessity, that exacting mistress, stimulated my father's efforts to acquire the knowledge of a profession, called such at that time through courtesy, and but little understood by those who practised it.

Gentlemen, you see to-day on every side the evidence of refined scientific investigation, skilled manual and digital dexterity and mechanical contrivances of no ordinary merit. Allow your imagination to travel back sixty years, when hot water as a means of softening the wax used for taking the impression of the mouth was not known, or the tray for holding same when ready for use, the coloring of the model, as a means of assisting the efforts to let down a block of bone cut from the tusk of the hippopotamus, out of which an imitation of teeth was to be carved, and you will form some idea of the means of instruction at my disposal when I commenced my professional education. Well do I remember the laborious toil associated in those days with the construction of a set of artificial teeth, the time consumed and the very defective result. Six weeks was the usual time spent in the manufacture of a complete denture when working bone and natural teeth; each tooth was drilled through the pulp chamber, a silver top screwed into it of required length and rivetted, in the ordeal often split, consequent upon the dryness of the tooth. I should observe,

before the use of *human* teeth became general, it was customary to use extensively the hippopotamus tusk, sections were cut to suit the required curve, the enamel carefully *preserved*, and so cut as to insure a front aspect of enamel on the tooth carved.

In our museum you will see illustrations of the style of work I allude to. When human teeth were in fashion, our supply was usually had from the graveyard, and I recollect what attention was paid the grave digger, at his periodical visits to my father's residence, with his gleanings from the coffins, he chanced to expose in the discharge of his avocation. His visits were generally at night, and no hospitable duty in which my father might chance to be engaged was permitted to interfere with the reception of this ever welcome visitor into the *sanctum sanctorum* of the house.

The introduction of the gold plate as a means for mounting artificial teeth dates from the commencement of the present century, my earliest recollection of it being associated with the additional labour thereby imposed on the mechanic. The assistance of the brassfounder was now availed of as a necessity, and I am disposed to laugh when I recall the preliminary action before his services were brought into play. The model of the mouth being taken in wax, the impression of the *teeth* was filled with cotton wool, only leaving a shallow indication of their locality, the plaster was cast, and when fit to draw the under surface was carefully cut flat, all overhanging edges of plaster removed, and the model placed on a flat iron plate heated over the ordinary house fire; when the warmth of the plaster indicated the proper time, the attempt was made to draw the plaster from the wax mould so as to preserve it, the latter for a second cast giving the true length and position of the teeth to serve as a direction in the finishing stage. The first cast was carefully prepared, all extra plaster removed and consigned to the brassfounder, who supplied at his convenience a facsimile in metal. In these days we could not cut a pattern in sheet lead and get the gold plate flatted and in size suitable to our requirements, then the would-be mechanical dentist must melt alloy and roll his gold plate, and a laborious and perplexing duty it often proved to be in our efforts to contend with what metallurgists will understand as unaccountable brittleness, necessitating the repeated melting of the metal until the requisite ductility was obtained, this fact being proved when the ingot was rolled out to the required size. At this time natural

teeth were generally in use and attached to the frame by means of a top screwed into the tooth and rivetted at the obverse side of the plate.

In 1825 composition teeth, called at the time "Teno Metalic" were introduced to public notice, and with this novelty, increased labour to the dental mechanic; the idea of soldering a piece of porcelain to a gold plate seemed a doubtful matter. To Mons. Andebrau, of Paris, we are indebted for the invention. You will find some of the earliest specimens of this manufacture in the museum, the particular construction of the teeth will at once suggest the manner of attaching them to the gold plate, but you cannot understand with what care and anxiety as to the result, the operation was attended, the soldering was done with the ordinary blowpipe, each tooth twice heated to redness before its final attachment to the plate, ordinary binding wire being used to fix the tooth in the required position; now, fancy, if you can, the full number eight in position and ready for the last soldering, the gradual heating of the entire piece, in order to avoid the accidental cracking of one or more of the teeth, and the physical distress accompanying the necessary effort to maintain a continual blast, and you will understand one of the many labours imposed on the mechanical dentist of the time. Gas was not used as the soldering flame in those days, cotton wick, yarn and grease in the open cresset made up the soldering lamp, and many a distressing half hour I spent over it. When a very tough piece of gold plate was required, the metal was melted on a piece of charcoal with the blowpipe, and when in a molten state, cooled with the face of a hammer and then rolled. I have often melted one ounce of gold in this way, and if I succeeded in getting a tough ingot, I assure you I found it a tough job.

In 1829, my father went to Paris to learn the process of manufacture of the "teno metalic" teeth as invented by Mons. Andebrau, and after the required sojourn in that capital, returned to his native city, Cork, with the necessary information as to the materials used and the *modus operandi* of their construction, and I am proud to think with the introduction of those now highly prized and indispensable articles into this country, the name of Corbett will ever be associated.

For some years we laboured at the manufacture of the flat teeth with the usual uncertainty, meeting disappointments when least expected, but satisfactory results at times encouraged us to per-

severe farther in our efforts to produce a perfect article. In the year 1832 a Mr. Hallit called upon my father for the purpose of introducing to his notice a new form of mineral tooth, solid, of the natural shape, and having a tube in it to carry a pivot in lieu of the soldering platina points, which characterised the French pattern tooth. As the specimens he exhibited were a decided improvement on the mineral teeth then in use, my father readily accepted Hallit's terms for the necessary instruction in their manufacture. A suitable furnace was built in the only available room in the house, that in which my brother and myself slept, and forthwith we commenced our new manufacture, with varying success, occasional disappointments, but the results sufficient to reward our labours, until consequent upon the great heat used, we split the wall of the house to the very top. I regret more than I can express that I am unable to show you some of those same teeth, but I can a drawing of the furnace used in firing them and the receipt of the different ingredients entering into their composition, all in my father's handwriting, and given to me in the November of 1835, when I paid my first visit to this city (Dublin) as a medical student.

Gentlemen, you see in our museum those beautiful specimens of mineral teeth, manufactured by Messrs. Ash & Sons, they are the outcome of information given to that firm by my brother, in 1837, when he made and baked for them in a brassfounder's Hessian crucible, the first tooth they ever made, and in the summer of the same year he built for Messrs. Lemale & Co., of Charles Street, the facsimile furnace to that we used in Cork.

Gentlemen, as a representative of the old school of mechanical dentists, I am disposed to indulge in a little vanity when I recall all we were able to do, and the style of work executed in those days when we had *no* assistance, and witness the present state of things, when the mechanical dentist has everything done for him to make things easy. To indulge in a little poetic exaggeration, I am inclined to compare the one to the labours of Hercules, and the other to that of Paris, when given as a task, the allocation of the *Pomum Discordiae*. In our meeting here to-day we have a threefold object to attain; we are here to thaw that rigid formality, jealousy, and reserve which hitherto has kept us estranged from each other, and "froze the genial current of the soul." We are here to eradicate that noxious weed of empiricism and humbug which still grows rank, and "rots itself at ease" in our very midst, and we

are here to sow that seed which will vegetate, fructify, and grow into a tree, from the branches of which we will suspend the lamp of scientific knowledge and persevering research, which like unto that Promethian fire the Persians burn in the mountains, will flame night and day, never to be extinguished ; it will illuminate our individual onward paths to eminence and celebrity, and direct a discerning public in their search for cultured professional service.

Gentlemen, our committee have allotted space to exhibitors and time to speakers, so I must not exceed the limit of my privilege. In the observations I have made I was influenced by a desire to amuse rather than to edify or instruct, of the measure of my success you must be the arbiters, as such I await your verdict—be merciful in your criticism, and may I not hope to hear it in the language of Mercutio when describing his wound, “ ’Tis not so deep as a well, nor so wide as a church door, but ’tis enough, ’twill serve.”

A vote of thanks to the new President was proposed by Dr. SMITH, of Edinburgh, seconded by Mr. SMITH TURNER, and carried by acclamation.

After luncheon at 2.30 p.m., Professor George F. Fitzgerald, F.T.C.D., conducted the lady visitors of the Association over Trinity College and its many interesting buildings.

After luncheon on Thursday the reading and discussion of papers was proceeded with in the Anatomy theatre.

THE PRESIDENT’S GARDEN PARTY.

At five o’clock the President and Mrs. Corbett received members and friends of the Association at a garden party in the Fellows’ Gardens. An immense number of guests were present, and although Jupiter Pluvius insisted upon joining the party it was evident that it required more than a shower of rain to damp the spirits of the Association, and the veteran President had the satisfaction of triumphing over the weather. With the kind permission of the colonel and officers the splendid military bands of the Black Watch and the King’s Own Regiments, conducted by Mr. Buck and Mr. Leeson respectively, played capital music, and underneath a capacious arcade the company made merry with refreshments and gossip until at last the rain, disappointed at being unable to mar the sport, retired and left us unmolested for the rest of the meeting.

The Annual Dinner.

At seven o'clock p.m. the annual banquet of the Association was held in the grand hall of the Royal University, which was appropriately decorated for the occasion. About two hundred guests sat down to the entertainment. The band of the Royal Irish Constabulary played an effective selection of music during the dinner. The following were amongst those who had received invitations :—Prince Edward of Saxe-Weimar, the Chief Secretary for Ireland, Colonel Sir West Ridgeway, the Archbishop of Dublin, the Most Rev. Dr. Walsh, Mr. Justice Monroe, the Private Secretary to the Lord Lieutenant of Ireland, Dr. Blythe, Dr. Banks, the Protestant Archbishop of Dublin, Dr. E. H. Bennett, Sir Robert Ball, Mr. John E. Barry, Dr. John K. Barton, Dr. Brennan, Dr. Dudley Buxton, Dr. A. H. Corley, Dr. Cruise, Sir Charles Cameron, Dr. Creed Meredith, Mr. Joseph Corbett, Mr. Thomas Drew, R.H.A. ; Mr. D. B. Dunne, Mr. George Drury, Mr. William Colles, Mr. Henry L. Creswell, Professor Cunningham, Dr. Duffy, Mr. George Drury, Major-General Davis, Dr. Edward Dowden, Lord Justice Fitzgibbon, Dr. Fitzgerald, Professor Fitzgerald, Dr. Grimshaw, Mr. Bailie Gage, Dr. Gordon, Mr. W. P. Geoghegan, Mr. R. W. A. Holmes, Sergeant Hemphill, Mr. B. Hone, Mr. J. Hogg, Dr. Hamilton, Commissioner Harrel, Sir Andrew Hart, Mr. N. Hone, Rev. Dr. Haughton, S.F.T.C., F.R.S. ; Mr. J. Malcolm Inglis, Mr. J. J. Jameson, Dr. Jacob, Dr. Kidd, the Lord Chief Justice of Ireland, Mr. J. Lloyd Blood, Dr. M'Namara, Dr. J. W. Moore, Dr. Austin Meldon, Dr. Robert M'Donnell, Mr. J. W. Moffit, Sir Richard Martin, Mr. William Mulhall, Dr. Maguire, Mr. G. E. Newland, Mr. J. W. Newland, Dr. Hepenstal Ormsby, Mr. Walter Osborne, The President of the College of Surgeons, Mr. G. V. Patton, LL.D. ; Mr. J. T. Pim, Mr. Ambrose Plunkett, Sir William Stokes, Dr. P. C. Smyly, Dr. Purser, Sir George Porter, Lord Rosse, Mr. S. A. Roberts, Rev. Dr. Stack, S.F.T.C. ; Dr. Storey, General Sankey, Rev. Dr. Stubbs, S.F.T.C. ; Dr. Traill, F.T.C. ; Mr. J. R. Wigham, Dr. Wheeler, &c.

During the latter part of the evening a large number of ladies were present in the gallery listening to the speeches. This is the first occasion that the fair sex have paid this compliment to our meetings, we hope it will not be the last.

The chair was taken by the President, Mr. CORBETT, of Dublin. On his right sat the President of the Royal College of Physicians,

Dublin, and on his left Mr. Fitzgibbon, the President of the Royal College of Surgeons, Dublin.

Dinner over the *Non Nobis* was sung by a select party of vocalists who were guests on the occasion, and who contributed some exquisitely rendered quartettes during the evening.

The PRESIDENT: The first toast I have to propose is one that requires no observations from me. It is the health of "Her Most Gracious Majesty the Queen."

The toast was drunk with enthusiasm, and "God save the Queen" was sung as a quartette, and also in chorus by the guests.

Mr. TURNER: It is my privilege to read a telegram which Mr. Booth-Pearsall has received from Sir Edwin Saunders. It is as follows—"I am drinking the healths of the genial President and the indefatigable Secretary and success to the meeting."

The PRESIDENT then proposed the "Army and Navy," and Major Rogers, of Cheltenham, responded.

Mr. PEARSALL said the Committee had taken the unusual course of making the toast of the "Press" the third on the list. He considered that the press amply deserved it. It had been a standing grievance for many years that this toast was relegated to the end of the evening when nobody listened to it, and he thought it would improve matters very much to put it third on the list, so that they could hear something worth listening to from the members of the press who were present. He had much pleasure in coupling with the toast the name of Dr. Jacob, who had taken a very active interest in their profession for many years. He had published the most disinterested and impartial criticisms upon many things that had taken place in connection with their profession. He (Mr. Pearsall) had in addition to associate with the toast the name of the editor of the Journal of the Association, Mr. Arthur S. Underwood. He was always at hand and ready to do what he could for them.

Dr. JACOB, in responding, said that on behalf of his brother pressman, whom he inefficiently represented, he felt deeply the compliment which had been paid to them of placing the fourth estate so high upon the list of toasts. He entirely sympathised with the view that had been put before them by Mr. Pearsall, and thought that considering the importance of the press in public affairs, it was usually relegated on occasions like the present to a not very dignified position. He had to thank his friends of the Dublin press, who were far more influential than any special

journal could be, for having permitted him to speak on their behalf, and he had to thank the assembly for recognising in his person the fact that the journal which he represented had associated itself with, and taken a marked interest in dental affairs. He had watched the rise and growth of the dental profession within the last few years under the guidance of Sir John Tomes, but, probably, the public did not know as well as he and those who sat around him, of the enormous strides which that profession had recently made. The epoch of the last seven years was one of which the dental profession might well be proud, and he must say on behalf of the press in Ireland that it afforded them very great pleasure and satisfaction to be able to introduce a new line at the head of their columns, and to devote space to the specialities of a profession, the importance of which had not been fully estimated heretofore.

When they saw a number of gentlemen come together with enthusiasm and bring so much good material forward for the study of their speciality as the Association had done at its present meeting, they naturally felt respect for them and felt bound to hold their columns at their service. There was probably no era in the history of the press when a toothless journal would have been less appreciated than it was now. The journal that had not got its fangs properly filed up and fit for battle was not fit to be a journal at all, and if *caries* overtook the grinders of a newspaper it would speedily sink out of public estimation. Everybody now that wielded a pen was obliged to see that his materials were ready, and that his wit was sharp. He thanked them very much for having placed the press in the position that it occupied that night, and he again thanked his friends of the Dublin press who had allowed him to speak on their behalf. He assured the company that such interest as he had been able to give, and had pleasure in giving, to the affairs of the dental profession had not expired, and would be given in the future; and he most heartily wished the Association welcome to Dublin, and prosperity in the good cause which it had hitherto pursued.

MR. ARTHUR S. UNDERWOOD, in responding on behalf of the dental press, said that their kind reception of his name was doubly gratifying to him, for he could not do otherwise than regard their applause as in some sense a vote of confidence in the journal, and those who endeavoured to conduct it. They had heard that day that now they had invaded Ireland there remained no more

worlds to conquer, this was not true from a journalistic point of view, it still remained to them as an unperformed task to conquer America, and to obtain the co-operation of American journalism, in exposing and denouncing the frauds that were being daily perpetrated in the United Kingdom under the name of American dentistry. It was an undoubted fact that people in England used the name of American in a very false sense. In London they had a large number of people who were not Americans, and who never were in America in their lives, and who still in the most impudent manner assumed that nationality—which was a title to every man's respect—in order that it might be a cover to all sorts of chicanery. In this way there had grown up in England a class of men who ought not to be associated with any honourable profession. Unhappily self-dubbed Americans of this class were so associated, and against that false and ridiculous imitation of what was American, the Association and its Journal wished to strike.

Men who were neither Americans nor dentists, nor even honest men at all, assumed these titles with impudence, but not always, thank goodness, with impunity. It was, however, of little use to prosecute and punish, while the voices that could and ought most effectually to denounce them remained silent. The great world of honourable dentistry in America ought to disown these disreputable parasites, and he firmly believed that when they fully appreciated the gross nature of their offences, they would disown them. The American colleagues, whose skill had won their respect no less than their uprightness had won their affection, the able representatives of the New World, who practised in England, ought with unmistakeable unanimity to disown and denounce this unworthy tag-rag and bobtail. The very name of American dentistry, used as it was by advertising quacks, was an insult to common sense, for though certain modes of practice might find favour in certain countries, the great principles of dental science and progress were cosmopolitan, and the highly educated practitioners of Great Britain, France, Germany, Italy, and all other civilised countries shared them all—they were common property—as independent of race as any other branch of science or art.

The time had come for a disavowal, and the inducement of their American cousins to make this disavowal was the great conquest he for one was sanguine of making. He wished his American colleagues to know that the men that trafficked in their name were often men without any qualifications, destitute of pro-

fessional training of any sort, sometimes even tailors' assistants, chosen for their powers of selling anything and everything, mere shop touts in fact, that the work which they imposed upon the public was ridiculously bad, and that their methods of obtaining payment for this bad work were worse than the work itself. Let them realise this and he was confident the disavowal would not be long delayed. He would also have them remember that so long as the disavowal was delayed those who hesitated to utter it were by their hesitation aiding and abetting crime and rascality and weakening the cause of professional rectitude all over the world.

With regard to the journal, he would only say that it had nearly doubled its circulation and very nearly doubled its advertising columns during the last three years ; in fact, success was surrounding it in every shape. They did their best for the profession and if they fell short in any way, he hoped that the deficiency would be excused.

Dr. KIDD (Dublin) said—Mr. President : It affords me very great pleasure to propose to you "The British Dental Association." I see here a great assemblage of men who have striven earnestly and anxiously to advance their profession in the public estimation. I feel that that in itself is a sufficient warrant for calling upon you to drink the health of the British Dental Association. When this Association first undertook the task of raising their calling to the rank of a learned and liberal profession, I took a very large interest in their proceedings. I confess I regretted that they did not go some steps further than they did. It has always been my feeling that medicine—the science and art of medicine—is a great republic, one and indivisible ; that surgery as a science requires a man to be learned in medicine ; and that no man can be a good physician who is not versed in the principles, at all events, of surgery. I believe in the same way that no man is fit to be a dentist who is not a student of the sciences of surgery and medicine, and when some seven years ago the Dentists' Act was passed I, for my part, used my humble influence to induce our college to require that men should first be surgeons and then dentists. I believe, sir, that if you had gone that far you would have done still more worthy service to your profession and to the public interests. Unfortunately, I did not succeed in having this enforced by the college. But they have used all their influence to extend the education of the dental profession, and now they hold

out facilities—very great facilities—to dentists to become surgeons. In order to become a surgeon of the Irish college, a man must pass the preliminary and four professional examinations. In order to become a licentiate in dental surgery of the Irish college, he must pass the preliminary and two of these professional examinations, as well as one in the special subject of dental surgery; and the College of Surgeons in Ireland hold out very great inducements to those who have passed these to go in for the remainder, and to become full-fledged surgeons.

I hope the day is not far distant when that will take effect, and that all men will be thoroughly versed in surgery who pretend to practise dentistry. The advance, however, that has been made is very great. No man can now be a dental surgeon who has not been educated in the preliminary sciences, at all events, of surgery; and I believe that in this way dental surgeons are rapidly obtaining a position in the public estimation which will ennoble their profession, and that they are becoming more able to serve the public in proportion to the amount of preliminary education they have received. I hope that this Dental Association will not cease in their efforts until they have all dentists members of the College of Surgeons, and all of them thoroughly educated surgeons. I believe it to be impossible that any man can be a thoroughly good dentist who is not a thorough surgeon. It has been my experience that cases of malignant disease of the jaw have been allowed to run on, because the dentist treating them did not understand surgery, and did not know what the exact nature of the disease was. Sometimes gouty men suffer from their teeth, and if they come into contact with a mechanical dentist who is not an educated man, he treats them for the teeth, whereas constitutional treatment is what is necessary. So that in every view, in order to be a good dentist a man must be a surgeon. I learned very recently from an address of yours, sir, that it goes even further back, and that actually the care of the teeth begins before the child is born. I was greatly pleased to find that principle laid down by you in such strong and clear terms, so that it comes round to what I have already said—that medicine is one and indivisible; that to be a good dentist you must be a good surgeon; and that to be a good physician or surgeon you must know something of dentistry. To be even a good obstetrician you must know how to take care of the teeth before the child is born.

The toast was duly honoured.

Mr. MORTON SMALE in responding to the toast said—Mr. PRESIDENT and GENTLEMEN: The gentleman who so kindly proposed this toast said that men should be surgeons first and dentists afterwards. I venture to think that it is rather the other way, and that a man should be a dentist first and a surgeon afterwards. If there be any diploma that I possess and that I value above all others it is that of Licentiate in Dental Surgery of the Royal College of Surgeons; and if it were told to me that in future I should have only one diploma I would elect to take that of Licentiate in Dental Surgery in England—or in Ireland—or in Scotland or anywhere in Great Britain. You know that our dental curriculum is rather a large one. We have a very good preliminary examination—the same that gentlemen have to pass who are going to take the membership of the College of Surgeons or Licentiate of the Royal College of Physicians. In addition to that we have a special curriculum in our own department. We have to spend three years in a mechanical workshop learning the mechanical part of our profession. Moreover, we have to spend two years in a general hospital, and two in a dental hospital, and I consider that a very good curriculum. The two years that we spend in a general hospital are devoted to anatomy, medicine, and surgery; so that our licentiate of dental surgery has a very good knowledge of medicine and surgery. If in addition to that he wants the higher diplomas by all means let him take membership of the College of Surgeons or “M.D.”; but let him take the Dental licence first. I did not know when I came into the room that I would have to respond to the toast; and I have been trying ever since to find an adjective at all adequate to describe the reception we have had in Dublin. I think the reception you have given us in this city is the most wonderful we have ever had, and I have to thank you with all my heart in the name of the Association for the kindness you have offered us. We have had a most wonderful executive here in the shape of the Council and Secretary of the Irish Branch of the British Dental Association. The practical way in which they have worked entitles them to the highest praise. The museum has been to all of us a source of the greatest gratification. Everyone saw how admirably it has been arranged; and from what I have seen of the preparations for the demonstrations that are promised to-morrow I am quite sure that they will be equally good. I

think therefore that our thanks are due very much indeed to Mr. Pearsall, to Dr. Stack, and to Dr. Baker also for the preparation of the Museum, and for the excellent paper which he read to us to-day about it. In short, we have to thank the whole Executive of the Irish Branch for this very admirable meeting. I should like to say this also, that I consider the British Dental Association a very valuable one. I should like it to be the centre from which all light and leading would come in the matter of dentistry. I should like it to be the point round which all dentists should rally. No member of the dental profession should hold aloof from its ranks. There should be a chain of membership formed which would be so strong that no matter what strain you put on it it would never break — whether the undue force should be empiricism, or the outside public which is so apt to lead us into unprofessional acts. I am sure that if you will all come into the Association and all act together the dental profession will take a stand which it has never taken in the past. But there seems to be one other thing necessary for us, as individual members of this Association, and that is a little self-surrender. We must sink our personal interests for the sake of the profession generally; and then the integrity of individual members will become a code of ethics sufficient for all. On behalf of the British Dental Association I beg to thank you for the very enthusiastic way in which you have drunk the health of our body.

Mr. JAMES SMITH-TURNER: Mr. Chairman and Gentlemen,— I rise to propose a toast of a very large and comprehensive character. I ask you to fill your glasses three times for the toast which I am about to propose. It is "The Universities and the Royal College of Surgeons in Ireland." Those present who have ever been examined at the College of Surgeons in Ireland, I am sure have nothing to recollect but the feeling of gratitude which has possessed them ever since for the honour conferred on them when they received the degree of Licentiate in Dental Surgery from that college. The Universities—including Trinity College, the reputation of which is almost world-wide—represent a higher grade of education to which many of our young men, I hope, will aspire. The Royal University of Ireland is, I believe, like the London University, an examining body, and we, to-night have been privileged to make use of their spacious hall for our evening's entertainment. The College of Surgeons also has been generous to us, and its President gave us his countenance last night, and

to-night he is again with us to assure us of the interest he takes in us. I will not prolong my speech further than by saying, of the pleasant memories which we shall link with this meeting, in the words of your native poet—

“ Long be our hearts with such memories filled ;
Like the vase in which roses have once been distilled ;
You may crush, you may ruin the vase if you will,
But the fragrance of roses will hang round it still.”

The memories of the kindnesses that have been shown to us by Trinity College, Dublin, the Royal University and the Royal College of Surgeons in Ireland will ever hang round us with sweet-smelling savour. I have the names of three gentlemen to associate with this toast. One, the Rev. Dr. Stack, has kindly undertaken to respond on behalf of Trinity College. Dr. J. T. Banks is a gentleman whose name is associated with the Royal University of Ireland; and the President of the Royal College of Surgeons has undertaken to reply for that College. I ask you then to drink the health of these institutions—these grand old institutions as two of them are—and the other, a flourishing young institution, associated with the names of the three gentlemen whom I have named.

The toast was drunk with enthusiasm.

The Rev. Dr. Stack, S.F.T.C.D., not being present,

Dr. BANKS said,—Mr. President and Gentlemen: I believe the pleasing duty devolves on me of returning thanks for the ancient and for the young university. The Universities welcome this great Association to Dublin, and I believe that to no other city or town in the empire could they come where a more cordial welcome would be accorded to them, and this is due in a great measure to the men who practice the profession of dentistry in this city. Men of the highest character in this city follow the profession of dentistry, men who are Fellows of the Colleges of Physicians and Surgeons, and who, if they had pursued any other branch of the great profession of medicine, would have succeeded as they do in the profession of dentistry. As a member of the British Medical Association, I have, and my colleagues have on all occasions, as far as in us lay, endeavoured to advance the dental profession. From the time of the passing of the Dentists Act, the British Medical Association has been anxiously devoting its attention to everything connected with the dental profession. We have sometimes had unpleasant duties to perform, not only for the professions of

medicine and surgery, but in the interest also of the dental profession. We have been obliged sometimes to perform the disagreeable duty of expelling black sheep, and disagreeable as that duty is, we have never shrunk from it. Gentlemen, I again beg to return you my most hearty thanks for the honour you have done me, and before I sit down, I must congratulate your Association on being presided over by one who is so honoured and respected in this city as Mr. Corbett is.

Dr. FITZGIBBON, President of the Royal College of Surgeons, Ireland, in responding, said,—Mr. PRESIDENT and GENTLEMEN: I will not endeavour to amplify by any words of mine that which has already been said by my worthy confrere Dr. Banks. I thank you, sir, and the British Dental Association for the hospitality which we have received here to-night, both for myself as President of the Royal College of Surgeons in Ireland, and on behalf of a large number of fellows and members of that College who are here present. The College of Surgeons and the surgical profession in Ireland have been hand in hand with the dentists in this city in the relief of human suffering, long before I was born. We regard Dentistry as a very important branch of the surgical profession. It has not been regarded in this city, as possibly it may have been elsewhere, as a minor art. An eminent dentist last night, at the dinner of the College of Surgeons, said it was a happy thing to be a member of the British Dental Association and to find that there was one spot in the world—Dublin—in which dentists were looked upon as being of some importance. In Ireland we have always found amongst the dentists men of the highest culture—men who were not only artists in their own particular branch of surgery, but whose social qualities endeared them to men of the highest rank of society—men who were the friends and associates of Curran and O'Connell, and who were always welcome at the social board.

In conclusion I must say that I believe that long after I shall have passed away the dental branch of surgery and the diplomates in dentistry of the College will be respected more and more, for there is no branch of surgery which has advanced in science more than theirs. They are now on a par with any branch of surgery. We have upon our Council of the College of Surgeons an eminent dentist; and I hope the day is not far distant when we shall have a very much greater number of dentists amongst our Fellows than we have at present. I thank you, members of the British Dental

Association, for the way in which you have responded to the toast on behalf of my College.

Dr. CRUISE proposed the next toast, "The Benevolent Fund of the British Dental Association." The object of that fund was so good that it really needed no comment. It was formed to meet the trials of those who, from illness or other causes, had fallen into distress, and whom it should be their pleasure as well as their duty to assist. They must not alone think of what they should do but they must act. Theory was good, but practice was better.

The toast was duly honoured.

Mr. G. W. PARKINSON responded. He thanked them for the way in which they had received the toast. The Benevolent Fund of the British Dental Association had now been five years established, and during that time it had relieved many persons in various ways. Their principal attention had been devoted to the children of deceased dentists; and he was happy to say that they were now maintaining and educating fourteen of those children. They wished to increase that number but could not do so without means. He had received several of the donation cards which had been left on the table, filled up and he hoped to receive many more. He thanked them very much.

Mr. DENNANT, Hon. Secretary of the Southern Counties Branch in proposing the toast "Our Visitors," said: he could only express the hearty pleasure which the members of the Association felt in receiving visitors amongst them at their annual gathering; especially when those visitors included men of mark—men distinguished in their several branches of Science and Literature.

Mr. BAILLIE-GAGE in responding said: that the present gathering showed what cosmopolitan feeling could do. He might say in all earnestness, as a layman of the city who was not a member either of their profession or the medical profession, that it was a great delight and a great honour to him to be associated with those whom he knew to be the men most devoted to philanthropy, and who sunk all differences and set aside all prejudices to serve the common cause of humanity and to alleviate suffering. Those who were associated in thought with him would never shrink from making such remarks as these, both in public and in private, about their time-honoured profession; and on behalf of the guests he thanked them for the hospitality they had shown that night.

Mr. CHARLES TOMES proposed the health of the Chairman.

His first acquaintance with the Chairman took place when he (Mr. Tomes) was quite a youngster—more than twenty years ago—Dr. Corbett having been on that occasion so good as to ask him to dine with him. Geographical considerations had since prevented him from returning that hospitality; and he would only say that ever since he had felt his kindness in taking him by the hand when he was a youngster. He would not pay him the sorry compliment of supposing that any words in the shape of adulation coming from the lips of one who was so much his junior could gratify him. No weak words of his (Mr. Tomes) were required to commend the present toast to the notice of the meeting. It was not their suffrages alone that had placed Dr. Corbett in the chair. The suffrages of the Odontological Society had made him their President, and he was now presiding over the most brilliant and successful meeting that the British Dental Association had yet held.

The toast was drank with cheers and a cheer for Mrs. Corbett.

The PRESIDENT: Gentlemen, with all sincerity I say that it is ample repayment for the labours of a long life to receive such a compliment as has been paid to me this day. Late in the evening, anticipating that some such compliment as this would be paid to me, and seeing a notice of it on the card I arranged my ideas with the view of delivering a speech; but as trains will not wait even for persons in my position I must content myself by begging of you to accept my most heartfelt thanks for the honour you have done me.

The company then separated.

Friday, August 24th.

THE DEMONSTRATIONS.

DURING the business hours of Friday demonstrations and clinics were held in the surgery museum of the school of physic. Some of the most interesting of these exhibitions defy description, for the simple reason that manipulative dexterity cannot be conveyed in words; if, therefore, we do not attempt a detailed account of this department it is because we cannot do justice to it. Those who wish to know what the various demonstrators can achieve with their electric mallet accumulators (which, by the way, is not a happily chosen name, meaning strictly an instrument for accumulating electric mallets), their smooth-ended pluggers—

how history repeats itself, this was the fashion here some five-and-twenty or thirty years ago—and all the other “dodges” and “tips” or “wrinkles,” that ingenuity can devise and skill can practise; those who would fain know these things must attend the meetings and go to the demonstrations. An account of a demonstration is always a tame business, because in each case over and above all the mechanical contrivances, the individual skill of the operator really gives the charm to the performance, the “personal equation” is the great thing, and that cannot be described. The room was arranged in a most perfect manner, and here we must pay a word of tribute to the chairman of the demonstration committee, Mr. Robert Hazelton, and his able and untiring henchman, Dr. Theodore Stack. Under the auspices of Mr. Hazelton and Dr. Stack the convenience of operator, patient, and spectator were all considered, each chair was penned in with a wooden railing, so that not only did the operator have elbow room, but the patient had air to breathe and the onlookers had a better chance of seeing. We shall hope to obtain from some of the demonstrators some illustrated details of their work in their own words for future publication.

A carriage excursion for the ladies of the party left the School of Physic at 10 a.m. to visit the Botanic Gardens, Glasnevin, once the residence of Addison; drive through the Phoenix Park to Knockmaroon Hill, the Strawberry Beds, and the Valley of the Liffey to Leixlip, returning in time for luncheon at Trinity College.

Annual Meeting of the Benevolent Fund.

At half-past twelve o'clock, the public proceedings of the Association commenced with the holding of the annual meeting in aid of the Benevolent Fund, in the Anatomy Theatre of the School of Physic, Trinity College.

The chair was taken by the President, Mr. CORBETT.

MR. G. W. PARKINSON, Hon. Secretary of the Fund, in the absence of the Treasurer, read the report of the latter, as follows:—

GENTLEMEN,—As is usual at the annual meeting of the British Dental Association, I have much pleasure in making my report of the Benevolent Fund of the Association. You have been informed from time to time in the Journal and at the quarterly meetings, of the work and progress of the Benevolent

Fund; but it is usual, and I think most desirable, that once a year the statement of the year's work should be focussed, that so a more exact idea of its position should be realised. Besides the balance sheet, which is the outcome of the very arduous work my brother-in-law, Mr. George Tawse, kindly undertakes in keeping our books straight, he has this year constructed a table of the receipts and expenditure of the Fund from its commencement, and from it you will see that our subscriptions and donations have steadily increased since the formation of the Fund in 1884, with the exception of the subscriptions for the year ending June 30th last, which have fallen short of the amount received during the previous year. A special effort has been made to increase the invested capital to £1,000 as a Jubilee memorial, and this, as you will see, has been accomplished. This progress is, I think, most encouraging, as it shows that the members of our profession in their prosperity are thinking more of their less fortunate brethren in their adversity. You will also see that the committee of management have at once availed themselves of the increased income to relieve cases of need brought under their notice. You do not, however, see the care that is taken by our indefatigable and able secretary, Mr. George W. Parkinson, in investigating the cases to ascertain if they are worthy of our help before it is bestowed. But I must proceed to details. Our receipts from all sources for the year ending June 30th of this year amounted to £426 1s. 11d. This sum was made up thus—donations, £159 5s.; subscriptions, £242 19s., and interest from investments, £23 17s. 11d. Besides these receipts we had in hand at the commencement of the year £235 8s. 5d., making a grand total for the year of £661 10s. 4d. This amount has been dealt with in the following manner:—£135 10s. has been invested, to make up our capital to £1,000 in round numbers, £259 1s. 5d. has been expended in allowances, education, &c., being £78 9s. 7d. more than was so expended in the previous year. Printing and stationery cost £4 19s., and postages and miscellaneous items £8 2s. 7d. We have £246 4s. 10d. in the bank in our current account, and £7 12s. 6d. in the hands of the secretary. From this sum the outgoings of the rest of the year have to be paid, for we have many children on our hands for education, whose quarterly bills have to be paid. Our income for the year ending June 30th last was £56 15s. 7d. greater than that of the previous year, the amounts being £369 6s. 4d. to June 30th, 1887, and £426 1s. 11d. to the same date this year; but unfortu-

BENEVOLENT FUND OF THE BRITISH DENTAL ASSOCIATION.

Dr.

BALANCE SHEET AS AT JUNE 30TH, 1888.

Cr.

Donations ... ..	...	...	...£159 5 0	Benevolent Allowances ... ..	...	...£259 1 5
Subscriptions—1886	...	£0 10 6		Postages and Miscellaneous ... ..	...	... 8 2 7
" 1887	...	74 8 0		Printing ... ..	...	... 4 19 0
" 1888	...	168 0 6		Investment of Capital * ... ..	...	... 135 10 0
Interest on Investments ... ..	...	—	242 19 0	* £1092 14 4 of 2½ % Consols, costing £998 15 0, held at June 30th, 1888.		
Cash in Bank of England at	...	...	23 17 11	Cash in Bank of England at		
July 1st, 1887	...	210 13 4		June 30th, 1888	...	£246 4 10
Cash in hands of Secretary at	...	...	...	Cash in hands of Secretary at		
July 1st, 1887	...	24 15 1		June 30th, 1888	...	7 12 6
			235 8 5			253 17 4
			£661 10 4			£661 10 4

August 9th, 1888.—We have examined the Books of the Benevolent Fund of the British Dental Association with the Vouchers, and hereby certify the above Balance Sheet to be correct.

(Signed)

W. F. FORSYTH,
ASHLEY GIBBINGS,

Auditors.

RECEIPTS.

	Year to June 30, 1888	Year to June 30, 1887	Year to June 30, 1886	To June, 1885	To December, 1884	Totals.
Donations	£159 5 0	£81 5 4	£55 0 6	£25 3 6	£692 11 6	£1013 5 10
Subscriptions	242 19 0	267 17 0	196 13 6	132 19 0	173 11 6	1014 0 0
Dividends	23 17 11	20 4 0	25 18 11			70 0 10
	£426 1 11	£369 6 4	£277 12 11	£158 2 6	£866 3 0	£2097 6 8

EXPENDITURE.

	£259 1 5	£180 11 10	£149 11 9	£64 6 4	£91 16 0	£745 7 4
Benevolent Allowances						
Investment of Capital	135 10 0	100 0 0	149 15 0	114 5 0	499 5 0	998 15 0
Postages and Miscellaneous ...	8 2 7	4 9 6	3 8 10	1 6 6	9 17 5	27 4 10
Printing	4 19 0	1 5 6	26 9 0		39 8 8	72 2 2
	£407 13 0	£286 6 10	£329 4 7	£179 17 10	£640 7 1	£1843 9 4
Cash in Bank and in Hand ...						253 17 4
						£2097 6 8

nately this increase is chiefly due to the Jubilee donations as mentioned above. The fact is that new subscriptions are coming in very slowly, and are hardly keeping pace with the loss of subscriptions discontinued. As will be seen by the statement of our income, our means of helping those applying to us in their need depends almost entirely on our subscriptions, and if these do not increase, the fresh cases of distress that come before us will have to be refused assistance. According to our laws, all donations of £5 and upwards must be invested. Therefore, as I have just said, it is to the subscriptions we must look for our available funds for helping those who apply to us. The subscriptions for the year ending June 30th, 1887, amounted to £267 17s., and those for the last year were £242 19s.; while the expenditure for the past year was £272 3s., being £29 4s. in excess of the amount received from subscriptions during that period.

I have thus given you but a bare statement of figures representing our financial position, which is, indeed, my province. I must leave it to our honorary secretary to give you some details of the cases we are assisting, which, though more interesting, are too often very sad; but, gentlemen, you have the pleasure of knowing that by subscribing to the Benevolent Fund you are conferring benefits on very many who, without such aid, must go to the workhouse, and grow up without suitable education; whereas by your assistance, many a child of a dentist will now be enabled to take a position in the world which otherwise it could not have attained.

I am, Gentlemen, yours faithfully,

A. J. WOODHOUSE.

Treasurer.

On the motion of Mr. ROGERS, seconded by Mr. W. BOOTH-PEARSALL, the report was unanimously adopted.

The PRESIDENT: Preliminary to any observations that I may make on the subject of the Fund, I shall give practical effect to my sentiments by handing in a donation (£10).

Mr. PARKINSON read the following report of the Committee of Management of the Benevolent Fund:—

Your Committee beg to submit to the contributors of the Benevolent Fund of the British Dental Association their fifth annual Report.

The Honorary Treasurer's annual financial statement, duly examined and certified, extends from the foundation of the Fund in 1883 to the end of the present financial year, June 30th, 1888.

The general business brought before your Committee during the last year has not been so numerous comparatively with past years. The number of children being educated at the expense of the Fund is now thirteen, this is an increase of two on the number last year. The eleven children accounted for in last year's report are all well and happy, and your Committee have deemed it advisable to keep them at school for another year, and sincerely trust that the funds will permit of their being educated and maintained for a still longer period. It has been found necessary to remove two children from one school and place them at another at the same annual expense, the school these children were at being found unsatisfactory in several respects.

Your Committee have also considered it advisable in one case to allow a boy who was being educated and boarded to be removed to a day school in the same town, the mother being allowed the difference of expense between the two schools for the maintenance of the child at home, the cause of its removal being ill-health and the necessity of a mother's care and supervision, which she is now able to give—this arrangement has been found to work very satisfactorily, the child and mother both being happier, and the former in better health than under the old arrangement.

Your Committee have only received an application from one widow for relief, and she has been helped in a way that will considerably help her to maintain herself in the future ; her case was a very sad one, and your Committee had to strain a point in her case, as in reality she was not a widow, but her husband, a member of the profession, is now, and likely to remain, a helpless lunatic ; she was totally unprovided for, and has several young children, for whom your Committee would have, had the funds permitted, placed at schools, as it is a most deserving case.

Your Committee have had no application from dentists during the past year, with one exception, that from an unregistered practitioner, which, according to the rules of the fund, could not be considered.

Your Committee deeply regret that in addition to the cases already enumerated, they have had to refuse the application from two orphans on account of there being no adequate funds to grant them any permanent relief, and for this, and other reasons, your Committee most earnestly appeal to the profession and other friends for more annual subscribers and donors, so as to enable them to relieve these cases in a permanent way when they arise,

and not to exercise the disagreeable and, in some cases, heart rending duty of refusing their appeals.

In accordance with rule 20, this annual report is now offered for your approval and acceptance, and a list of contributors has been prepared, and is now open to your inspection prior to publication.

In conclusion, the best thanks of the Association are due to the auditors, Messrs. W. F. Forsyth and Ashley Gibbings, for their kindness in again auditing the accounts (no light duty), and also to Mr. George Tawse for his generosity and professional skill in gratuitously preparing the balance sheet which is now presented for your approval.

On the motion of Mr. BROWNLIE (Glasgow), seconded by Mr. KLUHT (London), the report was adopted unanimously.

Mr. BROWNE-MASON (Exeter), mentioned an exceedingly sad case which came under his notice while he happened to be in Devonshire. It was that of a widow who was left with four children to educate, and who was entirely helpless and without friends. He knew that it would be of no use to ask for assistance from the Fund, and therefore he made a personal appeal to friends in the locality who were members of the profession, the result of which was such as to enable him to give very material help in the quarter needed. He mentioned this in order that members might know that all the cases that required help did not come to the Secretary's knowledge. They ought really to support the Fund more heartily than they did, and it was with very sincere regret that he learned that the annual subscriptions, on which their income mainly depended, had in a measure fallen off. He hoped that the present successful meeting would be the means of resuscitating the Fund and putting it on a good footing once more. What they wanted was to get subscriptions from those who had hitherto held aloof; his present remarks did not apply to those who had already helped them. In the case to which he had alluded, by dint of the help obtained from professional friends and outsiders they were enabled to set the widow up with a lodging-house.

Mr. DENNANT alluded to the bye-law which required each member of the Committee of the Fund who had completed a period of three years' service to retire. Having worked on the Committee himself for six years, he saw distinctly that great advantages resulted from continuity of membership. It was necessary that the

men who had a Fund to administer should have their work, and the persons with whom they had to deal, at their fingers' ends. Frequent changes of members on a committee of this kind were rather an evil, and he hoped the Association would see its way to allowing the committee man who had served three years to serve the following year. Of course he need not do so; but it was a mistake to require him to retire. If the bye-law on the subject could not be altered now, of course it could be next year.

Mr. S. J. HUTCHINSON (London) said that as a member of the Committee of Management he thought a few words of explanation were due as to the failure to a certain extent of the funds to meet the deserving case to which Mr. Browne-Mason had alluded. That was a special case in which a large amount of money was required; and it was greatly due to Mr. Browne-Mason that that large amount was collected. But he (Mr. Hutchinson), wanted to point out that a very small sum devoted to the education of a child did an immense amount of good. They had in schools in different parts of the country, as Mr. Parkinson had pointed out, twelve or fourteen children who were being educated at an average expense of £22 a year each. So that by the subscriptions they got from members of the Association they could do an immense amount of good by not only educating but also boarding and lodging children for sums of from £20 to £22 a year. His feeling had been rather in favour of educating and providing for children than of extending help to the parents except where, from physical infirmity, they were unable to help themselves. The fund in question was one purely for the purposes of benevolence. It was in no sense a provident fund; and they felt that the charitable intentions of the subscribers were best realized by employing the fund as one of pure benevolence and kindness.

Mr. DENNANT said the British Medical Association was fifty-six years old, whilst that Association was but nine years old. He would be the last to throw extra pressure on too willing volunteers. A provident fund could only be administered on a basis of actuarial exactness, and with the assistance of experts. He was of opinion that they should content themselves with having their fund a benevolent fund. He looked forward to the time when some of their younger and more energetic men might see their way clearly to the establishment of a provident fund in connection with the British Dental Association; but at present he did not think such a thing would be practicable.

Mr. PEARSALL said the Provident Fund established in connection with the British Medical Association was only four or five years old. The only way in which such a fund could be got up in connection with the Dental Association would be by the subscriptions of a large number of members; and every Dental Licentiate would be entitled to go upon it. Again, according to the reports of Mr. Ernest Hart, an enormous number of accidents happened to medical men, who, but for those accidents, would not want such assistance at all. There were several cases of medical men who had been incapacitated by severe accidents from work and who had got pensions from the British Medical Fund. They must, however, have subscribed to the fund for a year, or they would not have been entitled to pensions. But the British Medical Association Provident Fund had worked most splendidly; it had some £25,000 or £30,000 invested; and every member of the profession holding the degree of L.D.S. was interested in it. It was like a life insurance society and was managed by voluntary work. The expenses were reduced by the voluntary assistance of medical men all over the country in examining candidates and so on. The actuarial tables were calculated on the assumption of a loss of 5 per cent. for working; but the actual cost of working was only $3\frac{1}{2}$ per cent. In addition to the money invested they had a sum to put by as a reserve fund.

The PRESIDENT said he understood the intention of the Benevolent Fund of the British Dental Association to be the relief of immediate necessity. A small fund, adequate to dealing with urgent cases was sufficient for their purposes; and he did not see any necessity for accumulation. When money was wanted he would have great reliance on the good nature of his fellow-practitioners; and if sheer necessity should be the motive principle of the appeal, there would be a more ready response than if it were known that there was a large fund invested. In the latter case the reply would naturally be, "Draw upon your reserve, I cannot afford to contribute." Therefore they should be content with a moderate investment, and they should be correspondingly generous to those who applied to them in their dire necessity. The members of the Association were not in the same position as medical men at all. The latter were more liable to casualties than they were, and every one of them could from his resources put by something for a rainy day. It was his experience that the more urgent the case of necessity was, the more willing were members

of that profession to respond to any appeal made to them in proper spirit.

Mr. PARKINSON: I have much pleasure in telling you that the result of the appeal made by the cards last night was the collection of £50. The President also, had just presented us with a cheque for £10.

Mr. MACLEOD said the Art Union of pictures in aid of the Benevolent Fund had been successful to a certain extent, but not nearly so successful as it ought to have been. The value of the pictures to be drawn for was £70, but up to the present they had only received £29 2s. 6d.

Several members intimated their intention of taking tickets.

The meeting then adjourned for luncheon.

After luncheon on Friday the reading and discussion of papers was proceeded with in the Anatomy theatre.

AFTERNOON TEA WITH THE IRISH RECEPTION COMMITTEE

At five o'clock those members and their friends who were not detained too late at the demonstrations attended at an afternoon tea provided by the Reception Committee at 35, Molesworth Street (the rooms of the Dublin Art Club), where in addition to the afternoon tea they had the opportunity of examining at their leisure the pictures that had been lent or offered for the Benevolent Fund by members of the Dublin Art Club and by members of the Association. This exhibition was certainly the largest that has been brought together at an annual meeting, and here again Mr. Pearsall was to the fore with the brush as elsewhere with the pen.

DINNER IN HALL AT TRINITY COLLEGE.

At 5.50 precisely a limited number of members met to accept the kind hospitality of the Provost and senior Fellows of Trinity College. In the absence of the Provost the chair was occupied by the accomplished and genial Dr. Haughton, who proved in every sense of the words "a host in himself."

THE CONVERSAZIONE.

At 8.30 the members and their lady folk and all friends who were interested in the meeting met together at a conversazione in the Royal College of Surgeons. Although nearly a thousand guests assembled the Reception Committee had made such excellent arrangement and disposition of the space at their dis-

posal that hardly any crowding or inconvenience was experienced by anyone. Among the guests were—

Archbishop Plunket, Lady Plunket and Miss Plunket; Lord and Lady Talbot de Malahide, Sir George and Lady Porter, Sir E. Hudson Kinahan, Lady and Miss Hudson Kinahan, Lady Ferguson, Sir Robert and Lady Ball, Sir Richard and Lady Martin, Sir William, Lady and Miss Kaye; Dean of St. Patrick's, Miss West, Miss C. A. West, Sir Fenton Hort, Sir Ralph Cusack and the Misses Cusack, Sir George Moyers, Lambert, and the Misses Moyers, Mr. and Mrs. Maziere Johnston, Sir J. Mackey, Lady and the Misses Mackey, Dr. and Mrs. R. Browne, Rev. Canon Bagot and Mrs. Bagot, the Provost and Miss Salmon, Sir Andrew Hart, Rev. G. and the Misses Carson, Rev. T., Mrs. and the Misses Stack, Rev. Dr. Haughton, Mrs. W. Haughton, Rev. and Mrs. Conner, the Misses Conner, Rev. J. W., Mrs. and the Misses Stubbs, J. R. Ingram, Mrs. and the Misses Ingram, Rev. H. Poole, Mrs. and the Misses Poole, Dr. and Mrs. Bewley, Sir Patrick and Lady Maxwell, Dr. and the Misses Shaw, T.C.D.; Rev. J. and Mrs. Barlow, T.C.D.; Mr. and Mrs. Williamson, Mr. Abbott, Miss Maxwell, Messrs. Maxwell, Surgeon-Major and Mrs. Dorman, Captain and Mrs. Stewart, Rev. T. T. and the Misses Gray, Rev. J. P., Mrs. and Miss Mahaffy; Dr. Traill, T.C.D.; Mr. and Mrs. George Fottrell, Captain and Mrs. Langford, Dr. and Mrs. Tarleton, Mr. and Mrs. Palmer, Rev. Ronald and Mrs. MacDonnell, Mr. and Mrs. Tyrrell, Mr. Cathcart, T.C.D.; Mr. and Mrs. Burnside, T.C.D.; Archdeacon Walsh, Mrs. and the Misses Hamilton-Jones, Dr., Mrs. and Miss Carte; Mr. M'Cay, T.C.D.; Mr. and Mrs. Panton, Mr. and Mrs. Fitzgerald, Mr. F. Purser, T.C.D.; Mr. Maguire, T.C.D.; Mr. and Mrs. Hutton, Captain and Mrs. Riall, Dr. and Mrs. Hawtrey Benson, the Messrs. Carte, Judge and Mrs. Waters, Mr. L. C. Purser, T.C.D.; Mr. and Mrs. Roberts, Mr. and Mrs. Culverwell, Rev. Mr. and Mrs. Bernard, Mr. and Mrs. Bury, Col., Mrs. and Miss Rowley, Dr. J. R. Kirkpatrick, Dr. Kough, Mr. O'Sullivan, T.C.D.; Mr. and Mrs. Beare, T.C.D.; the Misses Chambre, Major-General and Mrs. Browne, Dr. and Mrs. Macnamara, the Misses Macnamara, Captain Macnamara; Rev. Dr., Mrs. and Miss Gwynne; Judge and Mrs. Webb, Dr. and Mrs. Hamilton, Dr. and Mrs. W. Smyly, Dr. Cronyn, Dr. and Mrs. Bewley, Dr. and Mrs. Leech, Mr. and Mrs. Dowden, Professor and Mrs. Stokes, Dr. Kirkpatrick, Professor Goodman, T.C.D.; Mir Aulad Ali and Mrs. Aulad Ali, Rev. Dr. and Mrs. Jeremy, Dr. and Mrs. Arthur Baker, Rev. M. Flood, Dr. and Mrs. M'Cullagh, Mr. and Mrs. George Drury, Dr. Fitzgerald, Mrs. Rochfort Wade, Mr. and Mrs. Fetherston H., Dr. and Mrs. O'Carroll, Dr. Purefoy, Dr. and Mrs. Scott, Mr. Angelo Fahie, Dr. Horne, Dr., Mrs. and Miss Cruise; Dr. and Mrs. Blyth, Dr. and Mrs. Hayes, Mr. and Mrs. Jonathan Hogg, Dr., Mrs. and the Misses Melden, Dr. C. Wood, Dr. J. J. M'Mahon, Surgeon-Major and Mrs. Devlin, Captain and Mrs. Patrickson, Major and Mrs. Gibton, Dr. and Mrs. Nixon, Mr. and Mrs. Catterson Smith, Captain and Mrs. Fox, Mr. and Mrs. Maunsell, the Misses Maunsell, Mr. J. Maunsell, Mrs. and the Misses Milner, Canon Dillon, Dr. and Mrs. Kidd, Dr., Mrs. and Miss Patton; Dr. and Mrs. Baxter, Dr. and Mrs. Scriven, Dr. and Miss Barker, Dr. and Mrs. Corley, Mr., Mrs. and Miss Pim; Mrs. Goodrich Shedden, the Misses

Wharton, Dr. and Mrs. Conolly Newman, Dr. and Mrs. Reid, Mr. Justice Andrews and Mrs. Andrews, Monsignore Lee, Dr. and Mrs. Armstrong, the Dean of Kilmore, Mrs. W. Stone, J. Malcolm Inglis, Mrs. Inglis, G. Stuart Inglis, Mr. and Mrs. Colles, Deputy Surgeon-General and Mrs. Whittaker, Rev. H. and Miss Johnston, Rev. A. Plunkett, Mr. L. C. Purset, the Bishop of Clogher, Mrs. Stack, Dr. and Mrs. Burke Kennedy, Dr. and Mrs. M'Ardle, Dr. Glynn, Mr. and Mrs. Skipworth, Captain Acland Troyte, Mr. and Miss Lane Joynt, Dr. and Mrs. Mayne, Mr. and Mrs. J. Dallas Pratt, General and Mrs. Lyons Montgomery, Dr. and Mrs. Byrne, Mr. and Mrs. Harrel, Dr. and Mrs. Dunne, Dr. Pollock, Dr. and Mrs. Gogarty, Dr. and Mrs. Harley, Dr. and Mrs. Moore, Dr. and Mrs. J. T. Arlidge, Mr. and Mrs. O'Grady, Rev. W. Brady, Dr., Mrs. and the Misses Ingram; Dr. Purefoy, Mr. Henry Yeo, Mrs. Henry Yeo, Rev. H. and Mrs. Noyes, Mr. and Mrs. David Sherlock, Lord Justice Fitzgibbon, Mrs. and Misses Fitzgibbon, Mr. Robert H. Moore, Miss Moore, Mrs. Underwood, Mr. and Mrs. George Coffey, Mr. and Mrs. Fane Vernon, Rev. C. W. Welland, Rev. J. A. Brannan, C.C., Mr. and Mrs. F. E. Du Bedat, Mr. and Mrs. H. Waterhouse, Mr. and Mrs. T. G. Waterhouse, Mr. and Mrs. Binden Stoney, Mr. and Mrs. Milo Burke, Dr. and Mrs. Edgar Flinn, Mr., Mrs. and Miss Findlater; Mr. and Mrs. George Morris, Mr. and Mrs. Gibson Black, Major-General and Mrs. Browne, Dr. and Mrs. Nedley, Mr. Ambrose Plunket, Dr. M'Dermott, Mr. W. Findlater, Mr. C. Findlater, Rev. E. Mathew, Dr. and Mrs. Gunn, Dr. and Mrs. Theodore Stack, Colonel and Mrs. Mayhew, Dr. and Mrs. O'Neill, Canon and Mrs. Twigg, Dr. and Mrs. H. Tweedy, Rev. T. V. Abbott, Dr. and Mrs. Thornley Stoker, J. J. Andrew, M. Alexander, J. S. Amore, W. B. Bacon, J. James Bailey, M. J. Bloom, F. H. Balkwill, W. George Beers, J. Charteris Birch, John T. Browne-Mason, Storer Bennett, A. W. W. Baker, H. Baldwin, George Brunton, Henry Blandy, Thomas Balcomb, John A. Biggs, J. R. Brownlie, Thos. Buckley, Thos. Broughton, Charles Browne-Mason, George Cunningham, J. F. Corbet, C. M. Cunningham, W. C. Corbett, Jno. C. Clarke, F. Canton, Geo. Campion, Donald R. Cameron, Walter Campbell, J. S. Crapper, Walter Coffin, J. F. Cole, Stephen A. T. Coxon, F. Dale, Thomas Dilcock, J. Dennant, R. C. Drabble, Louis J. Egan, W. H. Elwood, W. M. Fisher, H. P. Fernand, W. Finlayson, Frank Albert Franks, Wm. Fothergill, J. N. Fothergill, Frankland Gaskell, John Greenfield, Thos. Gaddes, H. N. Grove, J. H. Gartrell, D. Hepburn, J. J. Holford, Edwin Houghton, W. E. Harding, S. J. Hutchinson, Richard Harrison, F. E. Huxley, W. A. Hunt, J. Harrison, R. Hazelton, W. Helyar, A. J. Jones, Alfred Jones, M. Johnson, J. F. Kekewick, Wm. Kelly, Amos Kirby, T. E. King, H. J. Kluht, Roff King, R. F. H. King, R. P. Lennox, G. H. Lodge, W. Ladyman, George M. P. Murray, Henry B. Mason, Leonard Matheson, Gavin Martin, John M'Stay, G. C. M'Adam, W. Bowman MacLeod, J. Mummery, J. N. Manton, H. Mallett, A. A. Matthews, Thos. Mansell, J. H. M'Call, Charles Merilees, Breward Neale, J. H. Osborne, H. O'Keeffe, Patrick O'Meehan, J. Lee Pike, Geo. W. Parkinson, W. M. Penfold, James Petherbridge, Rees Price, R. Payling, W. Booth Pearsall, J. Renshaw, W. A. Rhodes, S. G. Reeves, T. W. F. Rowney, Richard Rogers, Charles F. Rilot, Claude Rogers, C. Robbins, Charles Rippon, Thos. Read, Geo. H. Street, Charles Stokes, Alfred Smith, Charles Sims, Morton Smale, John Stirling, J.

W. Senior, R. Theodore Stack, John Smith, J. Chas. Storey, Samuel Smyth, James Stocken, Martin Sherwood, D. McG. Smith, J. S. Turner, Joseph S. Thompson, Chas. S. Tones, A. S. Underwood, A. B. Verrier, W. A. Vice, W. H. Williamson, John G. Wallis, Sidney Wormald, Joseph Walker, Arthur J. Watts, J. Charters White, Charles West, Hubert Williams, E. H. Williams, George H. Whittaker, Andrew Wilson, W. Somerville Woodiwis, W. H. Woodruff, R. H. Woodhouse, E. Lloyd Williams, G. W. Yeates.

During the evening the Dublin Quartette Union, ably represented by Messrs. A. Williams, W. S. North, B. H. Mullen, and C. Kelly contributed some very perfect quartet singing in the board room, which was used as a concert hall for the occasion, while in an adjoining room during the intervals of the vocal music, the Royal Irish Constabulary band "discoursed" instrumental harmonies. This room presented a very strange appearance, for it so happened that it was the proper home and abode of certain osteological specimens. Behind the conductor stood the skeleton of a huge fossil elephant apparently all attention, and undismayed by the outbursts of a big trumpet; a little to one side the bony remains of some long-forgotten bird of the stork tribe looked with a half coquettish air at the unconscious bassoon, while in a dimly lighted corner a graceful form with dainty slippers sat listening to some member, who was telling no doubt of some antediluvian wonders, while behind them towered a huge kangaroo, its bony form apparently about to leap upon the unsuspecting *tête-à-tête*, to the infinite amusement of two human skeletons, whose knees looked as if they had given way in a paroxysm of laughter.

The library was thrown open and some choice specimens of illustrated books lay upon the tables for inspection, and the other rooms and galleries afforded every facility for movement and conversation, so that notwithstanding the large number of visitors there was none of the stifling heat and crushing that so often mars the pleasure of these sort of gatherings.

Refreshments were served in the Albert Hall during the evening.

After the conversazione a large number of gentlemen repaired to the rooms of the Dublin Art Club to enjoy a quiet smoke and gossip over the events of the meeting.

Here under the auspices of Mr. Bowman Macleod of Edinburgh, assisted by Mr. Rogers of Cheltenham and others, the raffle of pictures for the benefit of the Benevolent Fund was concluded,

and the lots drawn. This raffle was a capital idea which owed its origin to the fertile brain of Mr. Booth-Pearsall. 540 tickets at 2s. 6d. were disposed of, and realised the substantial sum of £67 10s. for the charity. The names of the winners which have been kindly forwarded to us by Mr. Macleod, we publish for the convenience of members who may have been fortunate enough to secure prizes.

No. in catalogue.	No. of winning ticket.	Artist.	Winner.
19 ...	229 ...	Joseph M. Kavanagh ...	D. Corbett.
20 ...	72 ...	W. Booth-Pearsall ...	J. McStay.
27 ...	249 ...	C. S. Tomes... ...	G. McAdam.
54 ...	158 ...	Mrs. Well-Robinson ...	J. F. Corbett.
61 ...	348 ...	P. H. Miller... ...	R. Holmes.
82 ...	3 ...	W. F. Osborne ...	J. Biggs.
99 ...	21 ...	W. Booth-Pearsall ...	Morton Smale.
100 ...	134 ...	S. A. Armstrong ...	D. Corbett.
102 ...	423 ...	E. L. Hanlon ...	A. Smith.
103 ...	86 ...	H. J. Hanlon ...	Miss Greenfield.
109 ...	505 ...	W. Booth-Pearsall ...	W. H. Woodruff.
115 ...	133 ...	C. S. Tomes... ...	C. West.
116 ...	174 ...	E. L. Hanlon ...	J. S. Amoores.
125 ...	60 ...	W. Booth-Pearsall ...	H. P. Fernald.
155 ...	188 ...	Grace Hastie ...	F. Canton.

After the drawing of lots there was more talking and smoking, and at a late hour the company separated for the night.

THE VISIT TO GUINNESS' BREWERY.

Just as we were about to attempt a description of this interesting excursion a letter reached us from a mysterious correspondent who signs himself "Stout and Mild," and which we print even at the risk of being asked to resign our editorial functions in consequence. It runs as follows:—

"So excellently were the arrangements, both for the more serious work and the pleasures of the British Dental Association, dovetailed, that after the evening conversazione, which lasted until past midnight, and was followed immediately by the early morning festivities at the Arts Club, one had time, perhaps hastily, to change one's clothes, hail an outside car, and if not too much occupied in holding on have a refreshing nap *en route*, and arrive in time at 9.45 a.m. to see all that was to be seen of the King of Breweries before the hour when the special train was to start for the Howth excursion.

"Nothing could exceed the courtesy of the gentlemen who con-

ducted the members of the Association through this colossal establishment. Their kindly greeting and interesting explanations of the malting and brewing processes so pleasantly given will long be remembered by all who had the good fortune and privilege of being able to avail themselves of this invitation.

"Outside the doors stood a little group of dejected members watching their friends enter. When asked why they were so sad they said they had in the hurry of changing clothes forgotten to bring their tickets, but a bold spirit, leaping from an outside car, said he too had forgotten *his* but he meant to try and get in in spite of this awful neglect. The others, pale and trembling, trying to assume a boldness they knew not of, followed on his heels to face the official whose duty it was to collect the cards. His kindly reassuring words as he admitted them all without question were too much for some of the weaker ones. It is said they shed tears. These, however, were soon dried when the erring members found themselves, with a huge concourse of their fellows, inside the friendly portals and veritably 'all among the barley.'

"It might have been interesting from a purely one-sided point of view, to have witnessed the brewing process in one of its more primitive forms. Such, for instance, as that in which the maize malt is ground between the well articulated molars of the South American Indian, and when fairly saturated by the secretions of his salivary glands, is transferred from this natural mash-tub to stone jars where, mixed with hot water, it is allowed to ferment at its leisure; but this was not to be. Here science had stepped in with all her appliances, to elevate the art to its highest state of refinement.

"In companies of twenty, the members of the Association, and their friends of both sexes, were led off by courteous guides holding high office in the establishment, and were initiated into all its mysteries. Mysteries there were, sufficient even to satisfy a modern romance writer. Indeed, the wanderings of Rider Haggard's mysterious 'She,' in the bowels of her rocky African fortress, or of Virgil and Dante's in the infernal regions, sink into comparative insignificance when compared with the wanderings of the British Dental Association through this weird region of booming machines, steaming cauldrons, colossal mash tubs and frothing seas of darksome liquid.

"Forward went the little companies, soon falling apart, by foaming torrents of sweet-wort dashing side by side with cooling

streams, on either side endless plains of germinating grain. High above head advance parties could be seen threading their way across narrow bridges and looking small at the dizzy height, like roped gangs of mountaineers when viewed through telescope from some Alpine valley. Onward still, now peering through the Stygian darkness of unfathomable reservoirs filled with the fermenting liquor, whose heavy froth could dimly be seen rising and falling in sullen gloom as it emitted its deadly gaseous poison. On again, now letting the eyes wander at leisure over veritable oceans of tranquil stout, calmly awaiting the right moment for 'cooling down.'

"On entering the cooling chamber life assumed a new aspect, for the roar of the machines, the heavy, sickening atmosphere, the volumes of steam, the cartloads of yeast, the mountains of hops, were things of the past, and the dazed eyes of the Association lingered for a few minutes with pleasure on the snow white walls and fretwork of pipes covered with a glistening mantle of hoar frost.

"One peep into the storage chamber was all that was allowed. The last individual who attempted to explore it, although armed with provisions for three weeks, returned in an emaciated condition with his self-imposed task unaccomplished.

"Looking at these endless rows of gigantic vats, as big as houses, one could only think what a thirsty world this must be, and wonder if Messrs. Guinness, Sons & Co., on the principle of a celebrated Macedonian monarch, ever wept because there were no more worlds to supply.

"At this point the Association reassembled, and a dainty little railway train awaited. All being seated, the diminutive engine started off at a merry pace, but soon, however, entered a darksome tunnel which led by a spiral descent to a part of the establishment, on the level of the Liffey, where a new world opened up. Here the barrelling process held sway. Barrels in thousands were everywhere. Barrels were being made, mended and filled, the stout being conducted in pipes from the storage vats. Little railways, both broad and narrow gauge, intersected in all directions. It was amusing to see the way in which the narrow gauge engines were made serviceable on the broader gauge when necessary. These little creatures were lifted bodily into the air by a sort of crane, where they snorted with evident delight at the prospect of their promotion, and were then let down

into trucks on the broad gauge line, whose wheels by an ingenious arrangement they were able to keep in motion.

"But one thing remained, and that was to taste the result of all this outcome of human ingenuity, skill, and enterprise. The Association tasted and pronounced the result excellent.

"It has been stated that the Association started at the outset in companies of twenty. Some battled on bravely to the end (that end which was not 'bitter' but 'stout'), others fell off by the way, but our kind friend Dr. Baker picked up all the fragments that remained, and saw everyone safely off in good time for the Howth excursion."

At 12.40 p.m., a still larger party started by special train for Howth, that beautiful but much neglected watering place. Arriving at Howth the company broke up into two sections, one of which proceeded in carriages through the town and along the hill road to the Pavilion, while the other walked through the demesne to the same place. These latter enjoyed the advantage of having the earl's nephew himself for cicerone, and were soon well posted in the strange legends and wonders with which the old castle abounds. Here luncheon was served, and Mr. J. R. WIGHAM, J.P., delivered a brief address on the uses of gas as an illuminant for lighthouses, illustrating his remarks by neat models.

Mr. CHARTERS WHITE proposed, and Mr. PENFOLD seconded a vote of thanks to Mr. Wigham for his address.

The motion was adopted with acclamation.

Mr. BOWMAN M'LEOD (Edinburgh) moved a vote of thanks to the president and the hon. sec. of the Representative Committee of the Association for the admirable manner in which they had carried out all the arrangements for their comfort, and trusted that ere long the Association would have another opportunity of visiting Ireland.

The motion was unanimously adopted.

Mr. W. BOOTH-PEARSALL, on behalf of the committee, returned thanks. He said they had done what they could in Dublin to make this meeting a success, and from the warm manner in which the vote had been adopted, he was sure their efforts had been appreciated.

EXCURSION TO HOWTH BAILEY LIGHTHOUSE.

At the request of the committee, Mr. J. R. WIGHAM gave a short description of gas illumination in lighthouses at the Bailey Light-

house. He explained the systems of illuminating lighthouses by gas adopted by the Commissioners of Irish Lights, which originated in the year 1865, when his invention was applied at Howth Bailey Lighthouse. Up to that time the oil lamp used in connection with the dioptric apparatus, devised by Fresnel in the beginning of the century, was the only lighthouse illuminant. Gas has been in use at Howth Bailey now for twenty-three years. It has never failed, but has always given great satisfaction to mariners.

Mr. WIGHAM explained in detail the construction and principle of the burner which is used under his gas system in lighthouses. The light for ordinary clear weather proceeds from twenty-eight jets of gas, burned so as to give an intense white light. No chimney glass is used, so that nothing is interposed between the light of the burner and the lens by which it is transmitted to the observer. The power of the light can be increased according to the state of the atmosphere by adding rings of jets, making the flame proceed from 48, 68, 88, and 108 jets respectively. The change from the lowest to the highest power, or *vice versa*, can be made in two or three minutes.

Howth Bailey is termed a fixed light—that is, the dioptric apparatus is that which is used for lights showing continuously to every part of the horizon. Lights of this character are much less powerful than revolving lights. The gas system is equally applicable to fixed and revolving lights. In the revolving light the dioptric apparatus is different, annular lenses being used instead of refracting belts, and the powerful resultant beam of light being transmitted to the observer at stated intervals. The gas system is especially applicable to what are called intermittent and group flashing lights, the intermission of the flame being caused by cutting off the supply of gas during the periods of darkness, and thus securing considerable economy not available in oil lights.

The usefulness of gas for lighthouse purposes, especially in foggy weather, became so apparent that the Commissioners of Irish Lights, acting under the advice of Professor Tyndall, their scientific adviser, applied it to the following lighthouses, viz :—

Howth Bailey	Fixed Light.
Wicklow Head	Intermittent.
Hook Tower	Fixed.
Mine Head	Intermittent.
Rockabill	Revolving.
St. John's Point	Intermittent.

- Galley Head Quadriform group flashing.
- Mew Island..... Triform group flashing, and
- Tory Island..... Triform group flashing, with long
focus lenses.

The lights from the last three lighthouses are the largest in the world, being produced by an arrangement of superposed burners and lenses, the invention of Mr. Wigham, which he described in detail, and illustrated by means of models.

This great advance in lighthouse illumination not having originated with the Trinity House, did not receive from that body the favour its merits deserved, but at the request of the Board of Trade they applied the gas system at Haistro Lighthouse, on the coast of Norfolk, where, as in the case of the Irish lighthouses, it has been a continuous success. Professor Tyndall was appointed to make experiments there, and reported in favour of gas as against oil. The engineer to the Trinity House, who also took part in the experiments, wrote a supplementary statement minimising the advantages of gas, which, however, he did not venture to deny. The Trinity House, therefore, stated that they preferred to use oil for their own lighthouses, but recommended the development of the gas system in Ireland. Notwithstanding this recommendation, the Trinity House, acting presumably under the influence of their engineer, opposed this development, and to such an extent that it was with the greatest difficulty the Irish Lights' Commissioners obtained sanction for the establishment of the great gas lights which they have fixed at Mew and Tory Islands.

Under these circumstances the President of the Board of Trade in 1883 ordered that a fresh set of experiments should be made, and appointed a committee, of which Professor Tyndall was a member, to carry them out and report upon the general subject of the best illuminant for lighthouses. This committee sat for a short time, but because the Trinity House and those connected with them who formed the majority of the committee came to the astounding resolution not to permit Mr. Wigham to show in the experiment a new form of light which he had devised, called the double quadriform light, the Irish Lights Commissioners withdrew their representatives from the committee, and it was consequently dissolved. Professor Tyndall had previously withdrawn because he thought that the Trinity House should not have predominance upon the committee.

The Board of Trade then committed the whole inquiry into the

hands of the Trinity House, apparently forgetting the opposition of that corporation and their engineer to the gas system, and the marked example of it shown by the refusal of their representatives upon the illuminants committee to admit the double quadriform light to competition in the trials. Trinity House in their experiments at South Foreland persisted in this refusal, and it is difficult to imagine any sound excuse for such an infatuated unreasonable course, so evidently detrimental to the public interest and subversive of the very object for which the inquiry was instituted.

The report of the Trinity House respecting the trials which were made at South Foreland was duly published and caused much dissatisfaction. Mr. Wigham pointed out to the Board of Trade, as well as in communications to the *Times* and otherwise, his objections to the experiments, and the report based upon them, not only because of the exclusion of the best form of gaslight, but for other reasons. Shipowners of the Mersey, the Clyde, the Tyne, the Severn, and of Belfast, Dublin and Cork, as well as the harbour authorities of various important seaports, repeatedly memorialised the Board of Trade to have the report remitted for revision to competent scientific authority not connected with the Trinity House. These memorials, and the correspondence connected with them, have been published as Parliamentary papers, and the matter is not likely to be allowed to rest in its present position.

After the refusal of the Trinity House to show the double quadriform light, it was erected with the consent of the Commissioners of Irish Lights at their experiment house here, and met with the warm approval of those who saw it. Sir Howard Grubb, F.R.S., made a report respecting it, the main substance of which is that, as its name implies, it transmits to the observer double the light of the most powerful lighthouse light in existence. Professor Barrett has also given testimony as to its extraordinary power in fog. Is it just or fair that in the hour of his greatest danger the light transmitted to the mariner should be only half of that which it is possible under this new system to give him?

Notwithstanding its enormous power, the double quadriform light is not costly, because for ordinary weather a single burner is sufficient, and although the consumption of gas in foggy weather is considerable, the average duration of fog during the year is only about 431 out of 4,380 hours of darkness in the year, and therefore the annual cost of the light does not much exceed that of an ordinary lighthouse. But even if it were otherwise Mr. WIGHAM

submitted that surely no question of expense should be allowed to interfere with the safety to life and property which would result from the adoption of this light.

Mr. Wigham mentioned that the highest power of the oil light used in lighthouses prior to his invention was 328 candles, but that under the stimulus of competition with gas, the oil light has been improved, and its highest power now used at Tuskar is 1,894 candles. The highest power of the gas, as at Mew Island and Tory, is 8,802, while the power of the double quadriform gas lights shown at Howth, as above referred to, is 23,472 candles. Mr. Wigham also pointed out a great collateral advantage of the use of gas for lighthouses in the important fact that where gas is used powerful fog signals can be instantly applied when the state of the weather requires it, whereas in other cases where steam or hot air is used, much time must elapse before the signal can be sounded, during which vessels may run into danger and be shipwrecked, as indeed was the case in the recent lamentable wreck of the "Victoria" at Dieppe. If gas had been the motive power in that case, no loss of life or property would have occurred.

In conclusion, Mr. Wigham paid a tribute to the Commissioners of Irish Lights for the persistency with which they had contended against the opposition of the Trinity House through the Board of Trade, and carried out in spite of great difficulties the gas system of illuminating lighthouses, which, as far as it has gone, has conferred great benefit upon navigation and maritime commerce, and which in the future, under their fostering care, is calculated to accomplish still more beneficial results.

A vote of cordial thanks was proposed to Mr. Wigham for his address, and this being put by Mr. PEARSALL, was carried by acclamation.

Southern Counties Branch.

A SPECIAL and informal meeting will be held at the Castle Hotel, Hastings, on Saturday, September 22nd, to give members residing in the eastern part of the district more especially, an opportunity for friendly intercourse and practical discussion.

Meeting of Council at 5 ; dinner at 5.45, price (without wine) 4s. 6d. General Meeting at 7 p.m.

The HON. SECRETARY will feel obliged if members intending to

dine will intimate the fact to him not later than Thursday, 20th instant, in order that suitable arrangements may be made.

J. DENNANT, Hon. Secretary.

1, Sillwood Road, Brighton.

ORIGINAL COMMUNICATIONS.

The Annual Museum and Its Contents.

BY ARTHUR W. W. BAKER, M.D., F.R.C.S.I.

SURGEON TO THE DENTAL HOSPITAL OF IRELAND.

In thinking over subjects for a paper at our annual meeting I came to the conclusion that I could not do better than direct your attention to the many interesting specimens contained in our annual museum, inasmuch as being the secretary or curator I should of necessity be more familiar with them than many of you now seeing them for the first time. Also the system upon which we have arranged them needs perhaps a little explanation; in short, that my paper should be more or less a commentary on the catalogue. These views being entirely endorsed by my colleagues require no further apology.

Those who have never arranged a collection have but a small idea of its difficulty; in many instances specimens were sent to us with no further history than their owner's name and address, and in some cases not even that—these we had to diagnose, describe, and remit to a class. Then the question of classification gave us many hours of anxious thought, for, as far as I know, there is no standard or recognised system, and to many anatomical or pathological divisions there are grave objections which may be reasonably advanced; for instance, in many cases of fusion of teeth it is difficult to decide whether it arose through a developmental abnormality or a pathological increase in the cementum; or to determine whether a particular tooth was of the species known as warty, or a supernumerary. These and other questions of a like nature troubled the minds of your museum committee, anxious as far as possible to make their catalogue free from obvious objections. That we have been quite successful we can hardly hope, but we may lay claim, I think, to have very materially lightened the labours of future museum committees, by inventing the machinery for working a museum. Of course it would not be possible for me to speak of all, or even most of the many valuable

specimens contained in our museum, but I hope to bring under your notice those that it would be a pity to leave unseen. In forming this museum we were at first disposed to lay aside many specimens which did not appear to be of any special value; but on reflection it seemed better to keep all specimens, and to group them, and we are now excessively glad that we did so, for by grouping a number of specimens one elucidates the other. Also since the museum has been formed I have heard men exclaim, "Oh! I had several specimens like this but I did not think it worth my while to keep them, much less make a note of them!" I would take the liberty of reminding you that, when the so-called wise men or astrologers of many hundred years ago, noted the appearances of certain stars they little thought that by their observations they were furnishing some of the data for the more accurate solution of certain astronomical problems of the present day; so it is with all scientific facts, by the grouping of a large amount of material which, taken individually, has but little significance, we are enabled to draw conclusions which may lend important aid to future investigations.

This idea should be ever present in our minds when we are inclined not to take the trouble of making a note of a specimen because at the present time it seems to have no importance or practical bearing. I would therefore urge upon all the importance of keeping accurate notes of specimens, not trusting to memory, which is apt to be treacherous, but carefully making, in black and white, a trustworthy record upon which we may hereafter securely found scientific conclusions.

Classification.—In making our classification we decided to begin with the abnormal teeth in bottles, to pass from them to the wet and dry preparations of jaws and associate parts, human and comparative, and to graduate through the models to the workroom section. This order, owing to a difficulty of numbering, we were unable to carry out, so were obliged to place the models immediately after the abnormal teeth.

The teeth we divided first into two great divisions, congenital or developmental and pathological or acquired deformities; of course, strictly speaking, pathological might include the former division, but we wish the term to be taken in its ordinary significance; the sub-divisions I shall explain as I proceed.

Odontomes.—In commencing our catalogue with odontomes we have more or less departed from the order usual in text-books, the

idea being to take first those abnormalities which affected the entire tooth germ. The odontomes we have sub-divided into—odontomes odontoplastiques, odontomes coronaïres, warty teeth, odontomes radiculaires, and enamel nodules.

The mixed classification that we have adopted from Broca's and Salter's divisions, may be fairly objected to, but on the other hand, it is generally admitted that most classifications of these tumours are unsatisfactory and do not altogether fulfil their object; even the latest, that proposed by Mr. Bland Sutton, does not quite get over the difficulty. The division we have made has at all events the merit of enabling us to describe better the present collection.

The tooth tumours are fitly headed by the interesting specimen contributed by Mr. C. S. Tomes; it consists of a confused mass of dental tissues studded here and there with small portions of enamel, and does not bear any semblance to a tooth; we have classed it as an odontome odontoplastique according to Broca's division. The odontome coronaire shewn by Mr. Macleod is a beautiful specimen in many ways, it shows the union of a pair of tooth germs one of which is involuted as regards its crown; it will perhaps be best understood by reference to the woodcut which will be found in another part of the museum. We have called Mr. Hele's odontome a warty tooth, of which it is a typical example; it was removed from the ramus of a patient aged eighteen, and appears to be the fused germs of the second and third molars.

To notice all these delightful specimens in detail would be wearisome and monotonous to all of you, so I shall content myself with speaking of but one or two other specimens. The warty teeth exhibited by Mr. Macleod and Mr. Canton, are on the borderland between supernumeraries and warty teeth, but after some discussion it was thought better to place them in the latter class. The specimen labelled odontome radicaire lent by Dr. Hunt of Yeovil, and described by him very appropriately as a "nutcracker for the Odontological Society," received by a process of exclusion its present title, as its malformation seemed to have taken place during the formation of its root. The enamel nodules are well represented, no less than eight examples will be found in the museum, two of these being contributed by the respected vice-president of the Irish Branch. Another excellent example is to be seen in the museum of the Royal College of

Surgeons, but as we had sufficient specimens contributed by our own members, we thought it better not to borrow it.

Before, however, leaving this class I would direct your attention to two specimens of extreme interest in the section containing the comparative pathology, viz., No. 1386, showing the development of an odontome from a tooth with a persistent pulp, and No. 1398, which is an odontome, from the jaw of a sheep.

Abnormalities of Crown.—The transition in abnormalities of the crown from enamel nodules to supplemental cusps being an easy one, we have placed these next in the catalogue. There are only two specimens, which may be accounted for by the fact that some specimens, although possessing this peculiarity, possess others of a more important nature, which necessitates their being placed in a different class.

The models displaying supplemental cusps may be advantageously studied in connection with this class.

Degeneration of Wisdom Teeth.—The other abnormality of the crown is headed "Degeneration of wisdom teeth." These teeth, more than others, with the exception of the upper laterals, show a tendency to deformity and disappearance; of the four specimens in this class perhaps that shown by Mr. Murphy, of Bolton, is the most interesting, it approaching the type known as "carnassial." This is also displayed by model No. 1,002; Dr. Stack drew my attention to this peculiarity.

Supernumerary.—Of supernumerary teeth we have a goodly show, no less than 34 specimens chiefly from the incisor region; and comparing these with the models in the supernumerary class we may argue that this abnormality is a fairly common one, and taking both these in connection with supplemental teeth we can see how nature frequently endeavours to revert to her typical mammalian dentition.

Abnormalities of the Root.—From supernumerary teeth we come to abnormalities of the root. These we divide into supplemental or extra number of roots; fused or deficient number of roots; and abnormalities as to form of root. Those teeth having a supplemental number of roots we have arranged in regional order, grouping together incisors, canines, bicuspid, and molars. We have further placed them in their anatomical positions, that is, the upper teeth have their roots pointing upwards, and the lower teeth theirs pointing downwards. This arrangement, I may add, has been carried out throughout the collection as far as possible.

Out of nearly 130 specimens of extra roots we have but one in which the incisors show this abnormality, consequently we may conclude that it is rather rare. As we move round the arch, however, we find that the canines frequently tend to develop double roots, and in these cases it is generally, if not always, the lower canine rather than the upper. The lower bicuspid have rarely two roots, while a three-rooted upper bicuspid is fairly common. The molars frequently increase the number of their roots, the increase being generally limited to a single extra root, and this observation would apply more particularly to incisors, canines, and bicuspid.

Diminished number of Roots.—The consideration of teeth with an excessive number of roots will at once lead to those cases in which we find a diminished number of roots; this appears principally to occur through cemental fusion, and although we have placed these teeth among developmental peculiarities, in many instances it might fairly be urged that the abnormality is pathological, so this division is in some cases an artificial one.

Abnormalities of Form in Roots.—Abnormalities of form in roots we have divided into—Recurving, Diverging, Bayonet, Oblique, and those with cupped apices.

Abnormalities of Form.—The many and varied curves exhibited by the roots of the teeth in the next class, seem common to all teeth, and will naturally excite wonder how some of them were removed without fracture. Bayonet-shaped roots deserve our attention as adding to the difficulties of fang filling, and doubtless have a similar ætiology to dilacerated teeth.

Mr. Pearsall has drawn attention to oblique rooted molars as being peculiarly difficult to extract; I fancy a forceps with a loose joint would in many cases overcome the difficulty. Diverging roots do not require special notice.

Teeth with Cupped Apices.—Teeth with cupped apices have been described and figured by Mr. Tomes in the last edition of his *Dental Surgery*. We are fortunate in being able to show seven specimens. This malformation occurs principally in bicuspid and molars.

Dilaceration.—We are fortunate in possessing eight specimens of dilacerated teeth, five of which are contributed from this city. We have divided these into diastasis of the crown; and diastasis of the root.

The former we have sub-divided into diastasis of the crown

forwards, and diastasis of the crown backwards. Molars alone are not included in this class, though, as Mr. Tomes has remarked, there is no reason why we should not meet them. We have relegated all doubtful or slight cases to the curved root class, but in many specimens it is extremely difficult to say when dilaceration begins and sharp curving ends.

Union of Teeth.—Gemination and fusion is the sub-division we have used for united teeth—the former a developmental abnormality, the latter a pathological process, which as such should have been placed later on in the catalogue, but it makes this class more complete to leave it where it is. Reference to the catalogue will show that gemination is more common amongst deciduous incisors than any other class of tooth, and among these there are two specimens of trigeminated teeth.

Macrodon'ts and Microdon'ts.—Abnormally large teeth with those below the average size constitute a special class which I need not describe.

Exostosis.—The most striking acquired abnormality is exostosis; this is classed by Mr. Salter as an odontome. Without in any way wishing to controvert his opinion we have thought it more convenient to relegate it to this position in the catalogue. Nearly a hundred specimens, some of them quite curiosities from their size, show this common affection. We have not attempted any further sub-division.

Calcification of the Pulp.—That the deposit of lime salts in the pulp is of such every-day occurrence must be the reason why we have only two specimens in this class. However, in another part of the museum you will find a beautiful preparation by Dr. Williamson of Aberdeen, and among the specimens lent by the College of Surgeons a beautiful example of this affection given to the College by the late Dr. Grimshaw.

Absorption of Root.—Some forty-five specimens are included under this heading. Thirteen of these contributed by Mr. Pear-sall have a definite history of accidental injury; as might be expected, these only include incisors and canines.

Erosion and Attrition.—The erosion and attrition class derive a special interest from Mr. Underwood's communication to the Odontological Society, which is doubtless fresh in all our memories. Among the models under this head will be found the casts which illustrated his paper. I would also have you notice specimen No. 805 in the College of Surgeons' collection, a tooth which is nearly cut in two as by a thread.

Fractured Teeth.—That the hard tissues composing teeth should occasionally give way is not to be wondered at, considering the rough usage they receive, and the force represented by the muscles of mastication. There is, however, a cause for regret in the fact that there is no specimen showing the rare occurrence of a united fracture in this class—a defect which I am sure will be remedied in the museum of 1889 at Brighton.

I cannot pass from this subject without directing your attention to the extremely beautiful preparation and drawing lent by Dr. Williamson of Aberdeen, representing a fractured incisor; it will be found at No. 859. I think in connection with this subject you might notice in the comparative pathology section No. 1382, which shows the results of fracture of the incisor teeth in a monkey.

Salivary Calculus.—Some large examples of this deposit are to be found in the museum, chiefly between Nos. 830 and 860. The specimens in the smaller bottles we have further subdivided into those where the peculiar colour is supposed to be due to pus, and those where the pigmentation is said to be acquired from blood; the deposit in these cases is more nodular than the ordinary tartar.

Stained Dentine.—The red hue sometimes observed round the necks and fangs of molars, and occasionally showing through the enamel of incisors I have found to be due to the inflammation excited by arsenious acid, setting free the hæmoglobin or colouring matter of the blood—four examples will be found in the museum.

Complication of Extraction.—Some fifty odd specimens illustrate the various accidents which may attend the extraction of teeth, and teach the necessity of caution and due deliberation in the performance of this operation; this remark, in my experience, is more particularly applicable to the temporary teeth, to the careful removal of which the public, and even sometimes our medical brethren, attach so little importance.

Mercurial Teeth.—We have retained the name mercurial for the teeth in this class, not that we believe that the peculiar markings are caused by the administration of mercury for the maladies of early childhood, but the term associated with Mr. Jonathan Hutchinson's excellent description conveys the idea of a malformation with which we are all familiar. To the eruptive fevers is traced this suspension of the functions of the enamel organ, and also of the odontoblast cells. To the category of chicken pox and measles, I would add whooping cough, which, in my ex-

perience, is a most potent factor in the production of this deformity. The central incisors belonging to these teeth also frequently present that notching which is so characteristic of hereditary specific disease, with this difference, that the incisors are not peg-shaped, and are not placed at that peculiar inclination to one another which is almost a diagnostic peculiarity in Hutchinson's teeth, so often does it occur. This description may not be intelligible to all, but a glance at the models from 1131 to 1150 will, I hope, make my meaning clear. Those interested in this subject should not fail to see the excellent preparation of jaws containing mercurial teeth lent by Mr. Pearsall (No. 1364), also the well-marked teeth lent by the College of Surgeons (No. 828), and presented to their museum by the late Dr. Grimshaw.

Arrest of Decay.—That the decay in teeth is frequently arrested in its downward progress is certainly true, and is well exemplified by the three specimens in our collection. Upon the vexed question of the redeposition of lime salts I shall not enter, as I think it can be more advantageously discussed elsewhere.

Neuralgia.—For bringing under your notice a collection of roots and teeth with a definite history of neuralgia, Mr. Pearsall certainly deserves praise, and his description is so full that it requires no further comment on my part.

Miscellaneous.—The last eighty specimens in this part of the museum are grouped under the title of miscellaneous, and comprise specimens that could not conveniently be placed in other classes. They have, perhaps, a greater antiquarian than scientific interest, if we except the teeth which have been replanted and some few others. The replanted teeth will doubtless have a special interest in connection with Dr. Cunningham's paper on implantation. If I pass over these specimens without notice, it is not because I do not attach due importance to them, but reference to them might exclude others of greater general interest, through lack of time.

College of Surgeons' specimens.—To most of the specimens contributed by the Royal College of Surgeons I have already alluded; it remains therefore but to note the unusually large specimens of exfoliated alveolus and teeth contained in bottles Nos. 816 and 823. There is also an interesting specimen, No. 825, of exfoliation after cholera; there is a note appended that mercury had been administered in this case, so perhaps the drug had as much to say to the lesion as the disease.

Specimens in Large Bottles.—The specimens in large bottles are more or less of varied interest; to many of them I have already drawn attention in connection with other specimens. There are some fine examples of molars united by fusion to be found in bottles No. 834 to No. 838 inclusive; but the specimen which perhaps is unique is No. 839. Here we find an example of a tooth firmly ankylosed to the alveolus; the tooth has on its root an ivory exostosis. Whether this is a true ankylosis is, of course, difficult to say without a microscopic examination, which in the interests of science I would strongly urge upon its owner, Mr. Paléthorpe, to have made. The possibility of the floor of the antrum being perforated by the roots of the wisdom tooth is well shown by specimen 846, contributed by Dr. Stack, and we learn from it the practical lesson not to overlook the wisdom tooth when seeking for the origin of an abscess of the antrum. At No. 848 we find an exquisite wax model lent by Mr. Arthur Underwood, representing portion of a jaw, the seat of a dentigerous cyst excised by M. Maisonneuve. The figure is doubtless familiar to all who have read Mr. Heath's essay, so you will hail the specimen as an old friend in another dress.

Models.—We now turn to the section of the museum devoted to plaster casts. We have divided these into irregularities of the teeth, irregularities of the jaws, injuries and diseases of the teeth, diseases of the gums, and injuries and diseases of the jaws. In round numbers we have about 400 models, comprising many casts that will interest the general surgeon as well as the specialist.

Irregularities of Teeth.—We have subdivided the irregularities of teeth into irregularities of number, irregularities of form and irregularities of position.

Irregularities of Number.—Irregularities of number we have further subdivided into supernumerary and supplemental teeth, and those abnormal dentitions where there is a deficiency of teeth. As I have already referred to the models of supernumerary and supplemental teeth, I shall merely direct your attention to the models Nos. 971 to 973 inclusive, showing supplemental bicuspid. Mr. Underwood's case was fully described in our Journal some time ago. Those very interesting models of Mr. Hepburn's showing deficient dentition are associated, as is frequently the case, with an abnormal development of hair; this is fully described in the catalogue.

Abnormalities of Form.—Abnormalities of form we have sub-

divided into degenerated teeth, geminated teeth, and teeth with supplemental cusps. As I have touched on all these before I need hardly say more about them, except that bicuspidis are here shown to be variable in size, and that the lower central incisors are not exempt from degeneration.

Irregularities of Position.—Teeth outside the normal arch, teeth inside the normal arch, teeth transposed, teeth rotated and various irregularities, have been adopted as the subdivisions of the class Irregularities of Position. I have no doubt a better division can be made, but with the comparatively small number of models of regulating cases sent to the museum, I think it was the best under the circumstances. I would have you notice the excellent plan by which Mr. Renshaw shows the plates used by him in regulating, viz., to take a model of the patient's mouth with the apparatus, *in situ*; it at once shows many points which a description would fail to convey.

Macrognathism and Micrognathism.—Side by side we have placed models of a large negro jaw, the jaws of the lady who played the Amazon Queen in "Babil and Bijou," and the diminutive jaws of General Mite; the contrast is curious. In this class will also be found examples of the V-shaped maxilla and contracted arch.

Injuries and Diseases of the Teeth.—Erosion and attrition, late and difficult eruption, fractured teeth, mercurial teeth and syphilitic teeth, are all included under injuries and diseases of the teeth. As I have already spoken of erosion, I shall proceed to notice retarded dentition. The most interesting model in this class is that contributed by Mr. Weiss; it will be recognised at once as the original of the illustration in several of the text books of the unerupted inferior wisdom tooth lying horizontally in the jaw.

Mercurial Teeth.—I have little to add to the remarks which I have already made on mercurial teeth; the six-year old molar is the tooth upon which we must rely for the typical markings. Mr. Hutchinson has drawn attention to the marked distinction between the white bicuspidis and the discoloured canines and molars between which they lie.

Syphilitic Teeth.—The frequency with which the teeth associated with hereditary syphilis show evidences of the mercurial taint, is as remarkable as the notching of mercurial teeth to which I have already alluded; it is somewhat remarkable that all the models in these classes, with the exception of Mr. Brunton's, have the names of Dublin contributors attached. I can scarcely

imagine that our English and Scotch brethren do not take an interest in these matters.

Diseases of the Gums.—Under diseases of the gums we have classed together—epulis, hypertrophy, papillomata, ulceration of the mouth. We are fortunate in possessing some excellent specimens of epulis; I would especially recommend to your notice No. 1164 as an unusually large example, which however is completely dwarfed by the wet preparations contributed by Dr. Stevens' Hospital, *vide* specimens No. 1338 to 1340 inclusive. The models of hypertrophied gum exhibited by Mr. Weiss are sure to attract your attention, as are also the jaws of Julia Pastrana or the pig-faced lady. The examples of papilloma, only two in number, are worth looking at, as they are comparatively rare; you will find them at 1171-2. Mr. Hepburn's models of closure of the jaws and ulceration of the mouth are so artistically realistic as to be quite startling and must be seen to be appreciated.

Injuries and Diseases of the Jaws.—Injuries and diseases of the jaws we have subdivided into—cleft palate, necrosis, alveolar abscess, dentigerous cysts, exostosis of the jaws, tumours, excessive absorption, and fractures. The cleft palate class naturally falls into the two subdivisions, congenital and acquired, and shows many interesting specimens. I would specially notice the admirable model, contributed by Mr. Andrew of Belfast, in which the cleft runs on either side of the intermaxillary bone. Mr. Andrew has further contributed to the interest of the case by some excellent photographs showing the case both before and after operation; these will be found in the screen with the other transparencies. In connection with the acquired clefts, I would ask you to study the interesting skulls contributed by Professor Bennett of this University, showing perforations of the hard palate produced respectively by syphilitic, scrofulous and lupoid ulceration.

Necrosis.—We have eleven excellent models showing the result of necrosis of the jaws; no less than five of these found their way to Dublin from Italy, being contributed from the museum at Turin, by Dr. Martini; we are also fortunate in being able to show five casts of the results of phosphorous necrosis, a disease which now is happily far from common.

Alveolar Abscess.—The casts of alveolar abscess require no observations; they are fully described in the catalogue.

Dentigerous Cysts.—Dentigerous cysts include those due to unerupted teeth, and those caused by chronic irritation round the

roots of teeth fully developed. Before leaving this subject I wish to direct your attention to Specimen 1380 showing forty-four denticles contained in a dentigerous cyst. It is exhibited by Mr. Sims of Birmingham. Exostosis, tumours and absorption of the jaws do not require special mention beyond what is in the catalogue.

Fractures.—We have placed fractures of the jaw designedly near the end of the catalogue, close to the workroom section where will be found their splints; as these come within the province of my colleague Mr. Murray, he will describe them better than I can.

Comparative Anatomy.—Trinity College has opened the storehouse of her treasures to lend us many interesting specimens of comparative anatomy—a subject in which we must all be more or less interested. I would have you notice the beautiful preparations in spirit from frozen sections of the ourang-outang and chimpanzee.

Human Anatomy.—The class devoted to human anatomy contains some interesting collections of young jaws, showing the first and second dentitions, contributed by my colleague Dr. Stack. The members of the Association will doubtless be interested in seeing how the prognathous jaws at the end of this class lead up to the jaws of the chimpanzee in the next class, containing the comparative anatomy.

We now get into a region of specimens of much and varied interest; from the comparative anatomy you will pass to human pathology, enriched by many valuable contributions from the museum of surgical pathology, presided over by Professor Bennett of this University. The Odontological Society have generously sent us some of their best specimens of comparative pathology; these you will find in a case by themselves, to some of them I have already alluded. Were I to dwell on them as they deserve and as I should like, I should detain you beyond the limits which the committee have wisely allowed for each paper. For the omissions and defects in the catalogue I must crave your kind indulgence, and plead in excuse its first appearance.

Section IV. of the Annual Museum and its Contents.

By G. M. P. MURRAY, Dublin.

MR. PRESIDENT AND GENTLEMEN,—I feel at the outset that I owe you an apology, having failed to comply with the rules of the Association, which require the submission of all papers to the Central Committee some time before the annual meeting, and the placing in the hands of members an abstract of the line of discussion to be adopted, and the principal points raised.

To the courtesy of Mr. Morton Smale, before whom I laid my case, I owe the permission of the Committee to read, in this irregular manner, these few remarks on Section IV. of the Annual Museum and its Contents.

Many of you have heard of the conscientious zoologist, who, deeming his treatise on the fauna of the British Islands incomplete without a chapter on "The Snakes of Ireland," found his remarks on the subject limited to the bald statement, "There are no snakes in Ireland." Even so, I, up to a short time ago, feared that the gist of my paper would be to the effect that there were no contents in Section IV.

However, certain kind friends, foremost amongst whom I must mention Mr. Brunton, of Leeds, and our own energetic secretary, Mr. W. Booth-Pearsall, rallied to my support, and have placed at my disposal sufficient material from which to point a moral, if not to adorn a tale.

Some years ago, a man of private means and no occupation, paying a visit to my father's workroom, and observing the various phases of work incidental to the conduct of a busy practice, delivered himself of the somewhat bold assertion that he would undertake to master the intricacies of mechanical dentistry in three days. To whom my father replied that it had taken him ten times that number of years to gather what little he then knew of the subject, and that he hoped that as long as he continued to work, so long would he continue to learn.

But in those days, every man had to learn from his own experience, and did not enjoy, as we do, the advantage of annual meetings of the British Dental Association, affording opportunities to the erudite, skilful and ingenious, to impart of their ample store to those less favoured brethren, who are willing and anxious to increase their knowledge; and to those who have eyes to see, the mute testimony of the objects in our Annual Museum is capable of

affording a liberal education, showing as they do, the steady progress begotten of increased knowledge, and an inventive genius ever active, ever restless.

The lessons to be learned from the unique collection of ancient and modern dentures in the adjoining room, will amply repay thoughtful study. There are to be found specimens ranging from the archaic "bone age" of dentistry through the sets of natural teeth obtained from the dissecting room and the body snatcher, the early home-made mineral teeth, the old silver and gold plates, the more modern vulcanite, that filthy and disgusting compound, celluloid, to the later developments of cheoplastic and continuous gum work.

The progress of mechanical dentistry may be doubted by those who hold that the dreary legend "Ichabod" might well be graven upon a cenotaph of vulcanite raised to the memory of that lost art; but few will be found failing to recognise what has been done in the development of extracting instruments, who have the courage to go through that chamber of horrors, contained in the cases adjoining the ancient dentures. Here are to be seen such blood-curdling weapons, as we might imagine wielded by the bony claws of the Apothecary in "Romeo and Juliet." Indeed, sir, we had some hope of showing the original leaden forceps, said to have been deposited by Galen in the Temple of Æsculapius, had not our negotiation with the enterprising Birmingham firm from whom we were to have obtained the priceless relic fallen through.

Will any one dare to compute the aggregate amount of agony inflicted by these grim monsters of a bygone age, the punches, keys, and early forceps now lying so innocently in their wooden cases. Retributive justice has overtaken them, their teeth are drawn, and they are condemned to an old age of coldness and neglect, supplanted by the beautifully designed instruments which we regard as a necessity of our every day lives.

He was a wise man of old who attributed human happiness to the possession of a healthy mind in a healthy body. Might not we make practical application of this truth, and realise that a healthy man in a healthy workroom will do more and better work than can be produced under adverse circumstances. The workroom section contains what I may call a suite of workroom furniture, whose hygienic principles should commend them to those who toil at the bench, or are careful for those whom they employ.

A man of literary pursuits, who spends long hours in writing,

will have a desk at which he can stand while working, and so relieve his muscles and expand his chest by change of position. The artist will stand at his easel and the artisan at his labour. Why then should he who is employed at the minute and absorbing work of mechanical dentistry, be condemned to sit with contracted chest and bowed shoulders, a position which is necessitated by most of our workroom benches?

The high bench, shown in Section IV. conveys a practical hint to those anxious to improve the conditions under which they work. I would also draw attention to the proposed arrangement of tools under the bench, and ready to the hand of the operator, while the space usually littered with files, pliers, sculptors, &c., is left clear and open for the work in hand. What ingeniously devised dust-traps most of us have arranged round our workroom walls, where the models of succeeding decades lie stored on narrow shelves, gathering continually dust, dust, and still dust; which, though innocent looking enough in its ever deepening repose, might not come with unblemished reputation through the searching ordeal of a microscopic examination. A strongly made, serviceable model-cabinet, such as may be seen outside, besides its convenience for reference, would do much to improve the atmosphere of our rooms. The lathe, with its powerful driving wheel and leather band, which will be found set up upon the bench, will repay study and reflection, and I would draw attention to the ingenious use to which old polishing brushes are put, to moisten and keep clean the corundum wheels, and prevent splashing.

Of all workroom materials, probably the most important and indispensable is plaster of Paris, and some specimens of great interest will be found upon the workroom bench, lent by Mr. J. Walker, of London. These show the different results obtained by mixing plaster in different ways, and being cast in earthen pots, one can readily judge of the varying amount of shrinkage under the different methods. I think it will be found that good fresh plaster, mixed with clean cold water will set harder, and shrink less than if prepared in any other way. There are also to be seen wooden bins for the storage of plaster, for which it is claimed that the material keeps better and is more convenient to get at than in tins.

Many of these workroom appliances speak for themselves, and will at once appeal to those who have felt the wants and difficulties they are designed to meet, as, for instance the vice or clamp for

holding zinc models while working up a plate. The advantages of the flasks for vulcanite and cheoplastic work are too apparent to need comment, and the ingenious articulator of Mr. Hele of Carlisle, simple in construction and effective in working, will commend itself to all.

Most operating dentists will acknowledge that amongst the most useful of appliances which inventive genius has given us, matrices take a high place. Indeed, I would place them in the very first rank, in the honoured company of the coffer dam, and the dental engine.

Mr. Brunton, of Leeds, shows us a complete set of these invaluable little allies, whose aid so often smooths out a difficult and complicated undertaking into plain and pleasant sailing. He also sends us an ingenious appliance for preparing gutta percha stoppings over hot water, by which one can obtain the exact degree of heat desired, without risk of injuring the material.

A very practical help to the operator, giving him the benefit of a third hand, is to be seen in the little finger-ring, cup and slab, in which stopping materials can be held close up to the scene of action during the operation, thus saving much time and permitting concentration of attention.

Two operating stools are also sent in for exhibition, one running on castors and attached to the wall by a jointed arm, and the other with a bicycle seat upon a rocking stand, and lest between these two stools we should come to the ground, the work-room seat can be also used beside the chair.

Great simplicity is the leading characteristic of the standard bracket, which will be seen in use in the demonstration room, where Dr. Yeates' bracket is also shown attached to the chair, rising and falling with it, and much lighter and more manageable than the heavy structures usually supplied.

I regret that we were unable to show in action the water motor invented by Mr. Smyth of Londonderry, but perhaps its mechanism can be better studied as it is. Employing the principle of the water-wheel, it requires but a low pressure, and is probably the smallest turbine ever applied to a practical purpose.

Most, if not all, of our appliances, tools, and instruments, have originated in the inventions of dentists to meet their own wants, and I cannot but think that these inventions would have been sooner developed and polished by the friction of friendly criticism and suggestion. Therefore it is that I hope our effort, made for

the first time at this meeting, may be but the beginning of greater things, and that it may be said of many a brilliant invention of the future, that it first saw the light in Section IV. of the Annual Museum of the British Dental Association.

LEGAL INTELLIGENCE.

Smith v. Dr. Huntley and Smith v. Dr. Coe.

WORSHIP STREET POLICE COURT, *Tuesday, 14th August, 1888.*

Before H. J. BUSHBY, Esq., Magistrate.

Mr. R. E. MELSHEIMER : Sir, I appear for the prosecution on both these summonses. The evidence will be practically identical in each case. I think both the defendants are represented by my learned friend Mr. Waddy ; and I would suggest to you that it will be convenient to take the two summonses together, if that meets with your approval and my learned friend's sanction.

Mr. WADDY, Q.C. : I entirely agree with my learned friend's proposal, except so far as this, that it is possible that in the one case I might wish to call the other defendant, and in the other case the other one. Subject to that, let both summonses be taken together.

The MAGISTRATE : Let it be so.

Mr. R. E. MELSHEIMER : Sir, I appear on behalf of the British Dental Association for the prosecution in these two cases. The offences alleged are, that the defendants have taken or used a title or description implying that they are specially qualified to practise dentistry, while they are not registered as the Act requires. I believe this is the first case under this Act that has come before you ; but the Act contains very similar provisions to those of the Medical Act ; the only difference being that in this enactment the words " wilfully and fraudulently " are omitted. The question, really, for you is, whether the defendants have, in fact, taken or used this description. The Act is the Dentists Act of 1878, 41 and 42 Vict., ch. 33. I will refer, first of all, to section 3, reading only the words on which I rely. " That a person shall not be entitled to take or use the name or title of dentist, or any name, title, addition or description implying that he is a person specially qualified to practise dentistry unless he is registered under this Act." Then, in the Medical Act of 1886, there is an addition to that section. That is the Act of 49 and 50 Vict., ch. 48. I think I need hardly trouble you to go to that Act.

The MAGISTRATE : You are not relying upon that Act ?

Mr. R. E. MELSHEIMER : It adds this, that the words, " title, addition or description where used in the Dentists Act, 1878, include any title, addition to a name, designation, or description, whether

expressed in words or by letters, or partly in one way and partly in the other." Now the title that these defendants are charged with using is the title of "D.D.S." of Pennsylvania University and Boston College respectively. Those titles, I should mention to you, although it is not of great importance in this case, are not diplomas recognised by the General Medical Council as being registrable under the Dentists Act. The only American diplomas that are recognised are those of Harvard and Michigan, so that these gentlemen, if they desired to comply with the provisions of the Dentists Act, would have to pass an examination to qualify. However, nothing, really, turns upon that. The fact remains that these gentlemen are not registered, and I shall prove that they have used this title of "D.D.S.," Doctor of Dental Surgery. That will be the whole case, and I shall ask you to impose such a penalty as you think meets the case. The maximum is £20, given by the 3rd section. Perhaps I ought, in justice to the defendants, to tell you a little more of the case, as I shall not have an opportunity of doing so afterwards. As I gather from this pamphlet, which I will prove, these gentlemen are assistants, or, at any rate, practising in the American Dental Institute, which has an office, or place for operations, at 55, St. James Street, another in Finsbury Square, and another in Thurlow Square. A number of gentlemen bearing designations of various American Colleges are named on the title page as practising there. Of them the senior—the gentleman who is first named—is, I believe, in fact, registered; but the others are not. The pamphlet sets out the advantages of being treated at this Institution.

Mr. WADDY: Perhaps, in strictness, I ought to object to this; but, as I am not before a jury, I will not.

Mr. R. E. MELSHEIMER: I shall prove this pamphlet.

Mr. WADDY: I assume that my learned friend will not only prove the pamphlet, but will bring it home to these gentlemen.

Mr. R. E. MELSHEIMER: Yes, I will not refer to it further than to say it does warn the public against persons who hold spurious or bogus diplomas. I do not mean to say that this is necessarily a bogus diploma at all, but it is curious that the pamphlet does not only warn people against advertising dentists, but against people who seek to attract patients, they not being properly qualified.

Mr. THOMAS SMITH sworn, examined by Mr. R. E. Melsheimer.

Q. You are clerk to the solicitors of the Dental Association, I believe, Messrs. Bowman and Crawley-Boevey, of 21, Bedford Row?

A. Yes.

Q. You received instructions in consequence of which you visited 44, Finsbury Square?

A. Yes.

Q. On the 27th of July last?

A. Yes.

Q. Were you shown into a waiting room ?

A. Yes.

Q. Was your name and address taken and an appointment made ?

A. No appointment was made.

Q. You were to see the dentist then and there ?

A. Yes.

Q. Was this pamphlet handed to you ? (producing same.)

A. Yes.

Q. I believe you do not know what the position of the person was who handed you the pamphlet, do you ?

A. No, I do not.

The MAGISTRATE : Somebody you found inside the building ?

A. Yes, in the waiting room itself—a lady.

Mr. R. E. MELSHEIMER : What position did she appear to occupy ?

A. She was sitting at a desk or table with papers on it, and, apparently, occupied the position of secretary.

Q. Were you then shown into an operating room ?

A. Yes.

Q. Who received you there ?

A. A gentleman.

Q. One of the defendants ?

A. Yes.

Q. Which one ?

A. The one nearer to me.

Q. Is that Dr. Huntley ?

A. Yes.

Q. Give us as accurately as you can the conversation you had with him ?

A. I addressed him, not knowing who it was, "Dr. Huntley, I presume?" He said, "Yes." I then took the pamphlet just handed to me. (The document was put in.) Pointing to the name "Dr. Huntley" in the list inside the cover, I said, "Is that your name?" He said, "Yes." I then said, "May I ask what the letters 'D.D.S.' opposite your name mean?" He said, "They mean doctor of dental surgery." I then said, "Is this pamphlet published with your authority, and is your name included in this list with your consent?" He first objected to answer the question, and asked me why I wished to know. I then said, "Certainly, I will tell you ; I am from the solicitors to the British Dental Association." I gave him their names, Messrs. Bowman and Crawley-Boevey, and informed him that the Association had instructed us to prosecute some of the gentlemen mentioned in that list. I then said, "Now, perhaps, you will answer my question—is the pamphlet published with your authority, and is your name included in that list with your consent?" and he said, "Yes, it is."

Mr. WADDY : Which of them said that ?

A. Dr. Huntley. I then had some further conversation with him,

in which he said, "You cannot touch me. I expected this. Dr. Clifford is the principal of this institution, and he is a properly registered man; I am aware that all the others are not registered, but we work for him." I then asked him if Dr. Coe was in the house. He said, "Yes." I said, "Perhaps Dr. Coe would like to see me while I am here with you?" He went out of the room and fetched Dr. Coe. When Dr. Coe came in, I said, "I have been talking to Dr. Huntley about this pamphlet, and his name being included in this list." I then said, "This is your name, I presume," pointing to the name of Dr. Coe in the list. He said, "Yes." I said, "Dr. Huntley informs me that the letters D.D.S. opposite his name in this list mean Doctor of Dental Surgery. I presume that the letters opposite your name being the same mean the same thing." He said, "Yes, they do." I then said this, "Dr. Huntley informs me that the pamphlet is published with his authority and his name is included in the list with his consent—does the same remark apply to you?" He said "Yes," at once. After some further conversation I left.

Q. Did you make any memorandum of the date of your visit?

A. Yes.

Q. Have you that with you?

A. It is on the back of the pamphlet.

The MAGISTRATE: Yes, the 27th July.

Mr. WADDY: There is no question that he went there on that day.

The MAGISTRATE: Very well.

Cross-examined by Mr. Waddy, Q.C.

Q. What did you say you were?

A. Clerk to Messrs. Bowman and Crawley-Boevey.

Q. How long have you been that?

A. A little over three years.

Q. How long is it since you took up this particular department of going about to get evidence against people?

A. That is part of my duty.

Q. How long is it since you took it up?

A. Since the gentleman who used to go about, as you call it, and get evidence, left.

Q. How long is it since you took it up?

A. About two years.

Q. And as a matter of fact one branch of work—we will see whether there is any other if you like—at this office is to go about for the purpose of having conversations with people in order to come and give evidence against them in court?

A. That is your peculiar way of putting it.

Q. Is it not the truth?

A. To go about and get evidence?

Q. Yes?

A. And to talk to people.

Q. Yes—as you have been describing just now?

A. I certainly have gone and got evidence, and I certainly have gone and talked to people.

Q. In how many cases? Am I right in saying that in every case tried in England, so far, you have been the common informer?

A. No.

Q. In how many cases?

A. I can give you the exact number if you allow me a moment. This is the fifth.

Q. Who sends you?

A. The firm.

Q. What firm?

A. Messrs. Bowman & Crawley-Boevey.

Q. Who are they?

A. Solicitors to the British Dental Association.

Q. Who does that Association consist of?

A. I do not know who it consists of, but it is an association of dentists and they are incorporated. I have the certificate of incorporation.

Q. Have you it with you?

A. Yes.

Q. I should like to look at it for a moment. I want it for another purpose (the document was handed to Mr. Waddy). Did you lodge the information in this case?

A. Yes.

Q. Then you are the prosecutor in this case?

A. Yes, I am.

Q. At whose instance do you say you are prosecuting—at the instance of the solicitors who employ you, or of this corporation. I do not care which, but I want to know?

A. Of course my employers instruct me to do what I have done, and they are the solicitors, as I told you before, for the British Dental Association.

Q. I know that; I should like to get at the bottom of this British Dental Association. I have heard a good deal of it.

A. You will find the name of the President and Secretary inside the cover of the paper you hold in your hand.

Q. At present all I can see is that it is the British Dental Association, the word "limited" being omitted by licence from the Board of Trade. Now I come to the other point. Both these gentlemen, Dr. Huntley and Dr. Coe, appeared to you, I think, to know thoroughly what you had come for.

A. I told them exactly what I had come for, and, therefore, they did know.

Q. That is not what you told us just now. You told us that Dr. Huntley directly you asked him what his name was, said, "I have

been expecting you." Dr. Huntley, according to you, knew perfectly well what you were coming for.

A. Perhaps that remark was placed a little too early in my evidence. I do not think he said, "I have been expecting you," until I told him exactly who I was.

Q. That is exactly the opposite of what you said just now?

A. I am sorry if I made a mistake.

Q. It is most important to be accurate.

A. It is. I was speaking from memory.

Q. No doubt your memory has been very greatly exercised in matters of this sort, and is not without practice, for you have been engaged in five raids of this kind. Did Dr. Huntley, or did he not, appear to understand the purpose for which you were coming?

A. Not when I first saw him.

Q. Can you explain how it is that you told his Worship a moment or two ago that he said at once, "I know what you are coming for?"

Mr. R. E. MELSHEIMER : I did not understand him to say at once.

Mr. WADDY : I am not very particular about that.

Mr. R. E. MELSHEIMER : It is quite immaterial.

Mr. WADDY : The point I want to get at is this : after he said that, and after you had informed him who you were, he then proceeded to tell you, "This is done by my authority ;" and in point of fact he told you everything that was necessary in order to enable you to complete the case against him.

A. He did after I told him who I was. There was no concealment.

Q. And the same with regard to Dr. Coe?

A. Exactly.

Q. He also knew perfectly well all about it, and told you in the most ingenuous way just the very thing you wanted. Was there anybody present at all at the time this conversation took place?

A. Dr. Huntley was alone in the room when I was shewn into it.

Q. You have told us that you saw a lady.

A. Yes. She was in the waiting room—not in the consulting room in which I saw both the doctors.

Q. Then with regard to the first part of the conversation, it would be impossible for me to get two witnesses against you, but with regard to the latter part of it Dr. Huntley and Dr. Coe were present.

A. I am perfectly well aware of the fact.

Q. I put it to you—and I warn you that there were two persons present, one of whom I can call to-day, and the other perhaps some other day—do you mean solemnly to say that either Dr. Huntley or Dr. Coe ever said one single word to you about the pamphlet having been issued by their authority?

A. Certainly they did. They answered the question, as you said, ingenuously apparently.

Q. What I put to you is this. I may as well put to you what I

suggest took place. I ask you whether this is not what took place—that you asked Dr. Huntley what was his name, and that he said “Dr. Huntley.” Did that take place?

A. No.

Q. Did you point him to the document and ask him what the letters “D.D.S.” meant?

A. Yes, I did, after saying “Dr. Huntley, I presume?” to which he answered “Yes.”

Q. There is no secret about it. Your sole object in going there was if possible, to qualify yourself as a witness to go against these gentlemen.

A. Certainly.

Q. Now then I ask you if you did not say to one or other of them—it does not matter which for my purpose—that if they were doctors of dental surgery it would be very easy for them to get registered?

A. That requires explaining.

Q. Will you answer my question. Did you not say that?

A. Certainly I will answer your question.

Q. Did you say that?

A. Will you kindly repeat it? You have rather confused me.

Q. You know perfectly well what the question was. The question I put to you I will repeat. Did you not say that if they were doctors in dental surgery it would be very easy for them to get registered?

A. No. Your subsequent remark rather confused me.

Q. You said that you could not answer without an explanation.

A. I saw what you meant by the question.

Q. Then you are answering not according to the question, but as to what you think I mean?

A. I am prepared to go into more of the conversation.

Q. I know who I am dealing with, you know. We do not meet for the first time. Did not one of them—I think it was Dr. Coe, but I am not quite sure—say, “No; every difficulty in this country is placed in the way of Americans being placed on the Register”?

A. He did say that.

Q. Did he not say, “We cannot practise and we are not practising on our own account, we are only salaried assistants.”

A. I do not remember that he used the expression, “salaried assistants,” but Dr. Huntley certainly said, “We are working for Dr. Clifford.”

Q. I put it to you because this I am in a position to prove. Ay or No, did not one of those two gentlemen now standing there say to you, “We cannot practise and we are not practising on our own account, we are only salaried assistants”?

A. I do not remember that those words were used.

Q. Will you swear they were not?

A. No. I will not.

Q. You had already ascertained, had you not, that Dr. Clifford, whose assistants they represented themselves, rightly or wrongly, as being, was a qualified dentist?

A. Yes; he is on the Register. I knew that.

Q. So that in point of fact you were going to the surgery of a qualified dentist for the purpose of entrapping two of his assistants?

A. That is your funny way of putting it.

Q. It is not funny at all.

A. There was no trapping. I only asked the question.

Q. You may call it funny, but I do not.

A. I asked one question, and then I asked a second question, and that question was not answered until I had informed Dr. Huntley who I was and all about it. There was no trapping on my part.

Q. We will see about that. My learned friend makes this evidence of course—fairly enough, and I am not quarrelling with him at all—by its being suggested that these two gentlemen one after the other admitted this document. I put it to you again. With regard to the first instance, nobody was present but you and Dr. Huntley I understand, and therefore, I cannot contradict you as regards that. But on the second occasion Dr. Huntley and Dr. Coe were present. Upon your oath do you mean to say that this pamphlet was ever shewn in the presence of Dr. Huntley?

A. Yes, certainly. They were both in the room.

Re-examined by Mr. R. E. Melsheimer.

Q. They told you all you wanted for the prosecution, and did they also tell you how they meant to meet the charge. They said you could not touch them.

A. They said, "You cannot touch us."

Q. They did not conceal from you any of these facts that you desired to know?

A. Not the slightest.

Q. If you have any explanation to give about that sentence Mr. Waddy put to you, "If you are doctors in dental surgery it will be very easy for you to get registered," you can give it.

A. That refers to part of the conversation. There was a very long conversation, and in the course of it, I do not know whether it was Dr. Huntley or Dr. Coe, but I take it that does not matter—but one of them said, "Well, we have our degrees, they are American degrees." I said, "Yes, you seem to attach considerable importance to those degrees; and I should have thought the training which you have had to undergo to obtain the diplomas you hold would have enabled you to pass any examination here for dentists." The reply was, "There is so much prejudice against Americans in England" (I think it was Dr. Huntley who said that), "that even if we did pass the examination they would manage somehow to keep us out."

Mr. R. E. MELSHEIMER: Then it will appear on the clerk's note

that the witness did not say, "If you are doctors," and so on. That, sir, is all the evidence. Then I put in the Dentists' Register from which you will see these names are not registered.

Mr. WADDY: That you may take. You may take it that all these gentlemen except Dr. Clifford, the principal, are not registered.

Mr. R. E. MELSHEIMER: If you should desire it, sir, to support what I stated in opening the case, I would refer you to page 24 of the Register, which shows that these titles assumed by the defendants are not titles such as could justify them in being registered. They would require an examination. I must refer you also to a subsequent statute which relieves me from the necessity of proving the assent of the General Medical Council to this prosecution.

Mr. WADDY: I do not think that is part of your case. I am not going to take that point.

Mr. R. E. MELSHEIMER: Very well. I was referring to page 24 of the Dental Register, showing the qualifications. That would rather go to the sentence than the offence. It only shows what American dental qualifications are recognised in England by the General Medical Council.

Mr. WADDY: It is to show, if I understand my learned friend aright, that this country does recognise the degree of doctor of dental surgery of Harvard and of Michigan, but no others. I believe that is my friend's point, and that is so undoubtedly.

Mr. R. E. MELSHEIMER: Yes, that is no part of the offence. The offence charged is that the title has been used by the defendants. You, sir, have no jurisdiction to enquire into the qualifications. If they had used the title and are not on the Register, the offence is complete.

Mr. WADDY: What title?

Mr. R. E. MELSHEIMER: The title I have proved they do use, D.D.S.

Mr. WADDY: That is the question for the magistrate.

Mr. R. E. MELSHEIMER: That is the case.

Mr. WADDY: Then, sir, with great respect, I venture to think there is no case, and possibly I may not be called upon to go into that conflict of testimony which your worship will be prepared to expect. With regard to the conversation which this man says took place, I am in this difficulty of course, that this being a *quasi*-criminal enquiry, I cannot call Dr. Huntley. I was at first under the impression that the female attendant who was mentioned had been present and had heard it, and I was in hopes I should have had one witness, for the purpose of to-day, whom I could have called before you to contradict what I venture to characterise as a pure invention with regard to a great deal which Mr. Smith has said. But with regard to the other part of it, Dr. Huntley and Dr. Coe were both present, and I am in this position. It is that part of the case which attacks Dr. Coe; it

does not attack Dr. Huntley at all, because he is assumed to have been slain by Smith in the previous interview. I should have been in a position to call Dr. Huntley with regard to that, and I venture to say that Dr. Huntley upon his oath would give a point blank denial to that which Mr. Smith has said with regard to the subsequent part of the interview.

The MAGISTRATE: With Dr. Coe?

Mr. WADDY: Yes, sir.

The MAGISTRATE: You say that Dr. Huntley will exculpate Dr. Coe in the matter.

Mr. WADDY: Yes, sir. Unfortunately with regard to the previous interview which took place between Dr. Huntley and Smith, I am at the mercy of this man. For the purposes of to-day I have no remedy, and all I can do is to ask you to discredit Smith's statement from the gross and extravagant improbability of it. We now know what Smith is. Smith is a man who calls himself a solicitor's clerk—in reality he is a common informer. He goes about, and his particular prey appear to be these gentlemen, who, with perfectly good qualifications in one sense of the term, are practising dentistry, and an attempt is being made at the present moment by this Dental Association to try, if they can, to stop everybody from practising dentistry except the people who can pronounce their own particular shibboleth.

Mr. R. E. MELSHEIMER: That is specially provided against in the Act.

Mr. WADDY: I am much obliged to my learned friend for saying that. That which is particularly guarded against is the thing they are trying to do. They are trying at this moment to make this court the engine for it. They know perfectly well that this Act does not prevent a dentist from practising, and that, I believe, is what my learned friend is indicating, judging from his interruption a moment ago. That is quite true. But then they say to themselves, "We cannot hinder these people from practising, they are perfectly entitled to practise, and there is nothing to prevent them; is there any way in which we can handicap them or distress them." Therefore they lie in wait, and directly they can find a man who has done anything which seems like giving himself the name—it is not the doing of the thing that they can prevent—they come down upon him. This Act is very carefully drawn, and I think the result of these most oppressive and most iniquitous proceedings, as I do not hesitate to call them, will be that the Legislature must see to this and have it corrected. It never could have been intended that such proceedings as these were to be covered by it. The Act provides that it shall not be used to prevent people who know what they are about from practising dentistry. In that respect it is totally distinct from the other Medical Acts. It is simply and entirely a question of registration, and you may know, sir, it was brought in apparently for the purpose of enabling persons to be registered as a

blessing to them and was not intended as a way of working oppression or tyranny.

The MAGISTRATE : I have not read the Act myself ; but do you mean it is not done with any view of protection to the public ?

Mr. WADDY : No: I do not mean that for one moment. In one sense, all Acts of Parliament are for the benefit of the public ; but you will find there is nothing whatever in this Act (and it was carefully kept out) to prevent any really qualified man from practising. Of course I do not want to be coarse or slangy, but you will understand that there is nothing to prevent any man pulling a tooth out.

Mr. R. E. MELSHEIMER : An unqualified man may do it. Even a blacksmith may do it, but he may not say that he is a dentist.

Mr. WADDY : The full meaning and bearing of this was not seen at the time the Act was passed, I venture to think. Both of these gentlemen are scholars and have passed their examinations, and stringent examinations, at the university in America.

Mr. R. E. MELSHEIMER : You cannot go into that.

Mr. WADDY : I beg your pardon. I use the document my friend has used. My friend has put it in, and I will use it.

Mr. R. E. MELSHEIMER : I object as a matter of form to my friend attempting to shew anything of this kind. My friend can state that these gentlemen have passed an examination ; but that is not one of the questions which you, sir, have jurisdiction to enquire into. If so, you would have to go further and enquire into the adequacy of the examination. I object to this subject being introduced at all, because the point for you, sir, to decide is the simple fact, has this title been used ?

Mr. WADDY : That is not the question.

Mr. R. E. MELSHEIMER : I submit it is.

Mr. WADDY : I thought my friend had finished opening his case and that I was addressing you.

The MAGISTRATE : I do not see anything irregular in what has been done at present. There are two questions always in these cases before a magistrate. One is, has an offence been committed ; and the next is, what penalty ought to be inflicted ? That may not be material as to the offence committed, although it may have some bearing on the penalty imposed. Of course, you might say that with an *ignoramus* not qualified himself in any way it would be worse.

Mr. R. E. MELSHEIMER : It would be more pardonable than if a scholar does it, and the offence would be the greater in using the title.

Mr. WADDY : My learned friend has put that in. I beg you to observe what I cannot help saying is the very hard way in which this matter is being dealt with. You will see the name "Dr. Clifford, D.D.S. (New York College)." There is no doubt at all about that. "Dr. Huntley" (that is my present client) "D.D.S. (Pennsylvania Uni-

versity)" ; then "Dr. Coe, D.D.S. (Boston College)." That is all I draw attention to at present. That being put in, I am entitled to shew to you that this is not a case like the one my learned friend has suggested, good humouredly, of some blacksmith hammering people's teeth ; but this is a case of two gentlemen of education, who have passed examinations, and obtained degrees. They have come into this country and put after their names the degrees they have obtained, just as I should be entitled to put after my name the degree I took when I was a boy at one of the universities. Can it be said for a single moment that this is an infringement of this Act? I will draw your attention to the words, and hope you will be of opinion that this is not an infringement of the Act at all. I shall press that strongly upon you. The Act was never intended to cover such a case as this, and these gentlemen have not done anything to bring themselves within the mischief of it. This is not a statement of their trade. This is a statement that at a certain time when they were younger than they are now, and when they were at the University, they obtained a certain degree, and whether it was a degree of Dental Surgery, or Doctor of Medicine, or Doctor of Laws, or Doctor of Divinity, or Bachelor of Arts, or Master of Arts, they are surely entitled to use in this country, as much as in their own country, the degrees they obtained by fair and honourable competition. That is all they have done. Would it not be straining the law to make it penal against these two gentlemen? Now, sir, let us see for one moment what the Act contemplates. It says, "Whereas it is expedient that provision be made for the registration of persons specially qualified to practise as dentists in the United Kingdom," and so on. I draw your attention to those two words "specially qualified." It is not "qualified." Any man is qualified to act as a dentist who has simply studied or learned the profession. When it says, "specially qualified," it must mean that kind of special qualification which consists in having a degree just as when you say with regard to a surgeon he is a qualified practitioner—you do not mean that he knows enough, or that he has got it in his head, but that he has passed the examination which qualifies him to act. This Act defines in Clause 6, those persons who "on proper examination shall be entitled to be registered." Now the words "entitled to be registered," are very important. Then I ask you to observe the 3rd section ; and I will draw attention to another, which shews clearly I am right. Then the 3rd section is this—"From and after the first day of August," and so on, "a person shall not be entitled to use the name or title of dentist"—they have not done that—"either alone or in combination with any other word or words"—they have not done that—"or of dental practitioner"—those words are in inverted commas, and, therefore, they cannot wander away from that—"or any name, title, addition, or description, implying that they are registered under this Act"—they have not done that—"or that he is a person specially qualified to practise dentistry unless he is registered under this Act."

The MAGISTRATE : You mean that you have to read the Act with the last statute, 49th and 50th Victoria.

Mr. WADDY : Yes. I will read that in a moment. It comes in at the end.

The MAGISTRATE : It relates to this section.

Mr. WADDY : Yes, sir ; I am going to read that as being part of

this clause. It says, "specially qualified to practise dentistry unless he is registered under this Act." All that they have not done. What are the words in the 49th and 50th Victoria? "It is hereby declared that the words 'title addition or description' where used in the Dentists Act, 1878, include any title addition to a name, designation or description, whether expressed in words or by letters, or partly in one way and partly in the other." That was intended to cover this case. If you turn to page 24 of the Act you will see that there are certain registrable qualifications with abbreviations used to denote them. For instance, "Licentiate in Dental Surgery," and then it gives the letters. Take the first line: "A Licentiate in Dental Surgery," and so on, "shall be entitled to be registered under this Act." Now the Act of 49 Victoria simply meant this: You are not going to escape because instead of calling yourself in full "Licentiate in Dental Surgery," you call yourself "Lic. Dent." That would be just as much a fraud as if you had the words written fully out. You cannot get out of it because you call yourself "D.D.S. Un. Har." What my friend has pointed out to you appears to me to be conclusive in this case. This is not a question of whether these people have pulled somebody's teeth out without being qualified. I do not think my learned friend would say that he could find a man in England who would come forward and say that these two gentlemen, for whom I have the honour of appearing before you, are not as thoroughly qualified to practise dentistry as any person in England—not specially qualified, but thoroughly qualified men. But are they entitled to be registered? Are they persons who could be registered? If I can show you that, although qualified, they could not be registered if they wished, surely my learned friend's contention is done for. Who can be registered? Kindly turn to Clause 6 of this Act—"qualification necessary for registration." Have these gentlemen got this? If they have, and have not been registered, then I have not a word to say for them, and I ought to sit down. They ought to have been registered if they have these qualifications: "Any person who (a) is a Licentiate in Dental Surgery or Dentistry of any of the medical authorities;"—they are not that; "or (b) is entitled as hereinafter mentioned to be registered as a foreign or colonial dentist"—they are not that, and why? Because the authorities have narrowly said, We accept the diplomas of two particular Universities in America. There are a dozen Universities or more in that enormous country, but we do not accept the diplomas of any other; no other diploma would entitle you to be registered, and the diploma that you Dr. Huntley have got, namely, of Pennsylvania University, although that may be one of as good standing as either Harvard or Michigan, it does not happen to be one of those mentioned in this Act, and, therefore, you could not be registered if you wished; you are a qualified man, you have passed through the examination, you know as much about it as anybody in England, and you are a thoroughly competent man, but still you cannot be registered because you were not at the passing of this Act *bonâ fide* engaged, and so on. See what they want to do. This is a roundabout way of trying, if they can, to stop any gentleman from practising in England who may have a perfectly satisfactory diploma obtained in America where, as a matter of fact, it is believed—it may be rightly or wrongly, I do not care about that—that dental surgery stands far higher than it does in our own country. The reason of

that it is not necessary to go into. But that is a sort of widespread and general belief. I dare say you would almost take judicial notice of that. What they are doing with regard to these two gentlemen is this. They send this Mr. Smith upon their trail; he goes and has conversations with them, part of which is true, and part of which I will prove to-day, and hope to be able to prove more conclusively some other day, is deliberately false.

The MAGISTRATE: Before you go on to that would you mind amplifying a little what you have just now said. I understand you to say that these gentlemen could not, if they wished, get themselves registered under this Act.

Mr. WADDY: Certainly not.

The MAGISTRATE: The Act says that they must not take any title or description implying that they are registered. You would answer that by saying, as you have done, that these letters, so far from implying that they are registered, point to a totally different sort of designation which would not entitle them to be registered.

Mr. WADDY: Precisely so, sir, unless they begin their education over again, and for two or three years go through the hospitals, which is an absurdity.

Mr. R. E. MELSHEIMER: Those are not the words which the prosecution rely upon. They are not the words I went upon in opening the case.

Mr. WADDY: My learned friend took good care not to deal with that.

Mr. R. E. MELSHEIMER: I only ask the Magistrate not to suppose that the answer that has been given is an answer to my argument. It is an answer to my friend's own.

The MAGISTRATE: If you had been expressing the offence exactly which you say they have committed, would you say they had used the name or title of dentist?

Mr. R. E. MELSHEIMER: No, sir, some other.

The MAGISTRATE: The Act says, "or description implying that he is registered under this Act."

Mr. R. E. MELSHEIMER: May I read the words which I rely upon "a person shall not be entitled to take or use the name or title of dentist (either alone or in combination with any other word or words) or of dental practitioner, or any name, title, addition, or description, implying that he is registered under this Act or that he is a person specially qualified to practise dentistry unless he is registered under this Act." Then I tender evidence to shew that he has used an addition which implies that he is specially qualified to practise dentistry and he has put that interpretation on it himself.

The MAGISTRATE: That is the point. It seems to be a legal question as to what specially qualified here means.

Mr. R. E. MELSHEIMER: That would make the enactment this—that a person who is entitled to be registered under that Act and does not do it commits an offence under the Act. I say that a person, whether entitled to be registered or not, who uses any of these titles or additions commits an offence.

Mr. WADDY: Any of which titles?

Mr. R. E. MELSHEIMER: Any of those mentioned in the 3rd section. He has used the title of D.D.S., implying, as he said himself, that he possesses special qualifications.

Mr. WADDY: No—forgive me.

Mr. R. E. MELSHEIMER: That offence may be committed (and this is the only point upon which I differ upon the law) by a person whether he is entitled or not to be registered. It may be committed by you or me.

Mr. WADDY: I must ask you not to interrupt me. I thought you had finished your case.

Mr. R. E. MELSHEIMER: I am only rising in answer to a question from the Magistrate as to how I put the case. Those are the words I rely upon.

Mr. WADDY: Perhaps the more convenient course will be for me to wait until my learned friend has finished his case.

Mr. R. E. MELSHEIMER: It is clear that they do not limit the offence to persons who are entitled to be registered under the Act; otherwise it would have been so easy to have said that persons being thus qualified must be registered. The words are that a person shall not be entitled to use such an addition, implying that he is specially qualified, unless he is registered. The words are wide, and intended to cover every identical practitioner.

The MAGISTRATE: It says, "specially qualified." That is the whole point, as it seems to me, whether specially qualified means specially qualified under the law of the land, or anybody falsely representing by letters that he is specially qualified under the law of the land, or anybody using some florid description of himself which will induce the public to expose their jaws to his manipulation.

Mr. R. E. MELSHEIMER: That is the question.

The MAGISTRATE: I have not made up my mind about it.

Mr. R. E. MELSHEIMER: I do not suggest that there would be any offence on the part of the blacksmith writing over his operating room, "I am able to pull out teeth, and anybody who comes to me shall have their teeth pulled out." But the moment he goes further and says, "I am a dentist," then he commits an offence.

Mr. WADDY: Dentist, or dental practitioner.

Mr. R. E. MELSHEIMER: Or any title *ejusdem generis* with those. Then you come to the amending Act.

The MAGISTRATE: They do not use the words "dentist" or "dental practitioner."

Mr. R. E. MELSHEIMER: No. They use what falls within the wide description, or any other letters or words which imply that he is specially qualified.

The MAGISTRATE: You say doctor in dental surgery means that he is specially qualified?

Mr. R. E. MELSHEIMER: Yes, sir.

The MAGISTRATE: That is the whole question.

Mr. R. E. MELSHEIMER: And that means specially qualified in fact, and not specially qualified under this particular Act.

Mr. WADDY: I think my learned friend has put his case in every way he can. Now, sir, let me draw your attention to my friend's information in this very case. What is the thing that he complains of? What he complains of is that we did take and use the letters D.D.S. There is also added "Pennsylvania University." That alters it at once from being a statement, "I am a clever dentist," to a statement, "I am a man who has taken a certain degree." I do not want to say anything that may be ridiculous, or would raise a smile, but it is very

much indeed like saying that a man who writes after his name "LL.D." professes to be a good lawyer, or a man who puts "D.D." after his name holds himself out as a good theologian, or a man having had conferred upon him the degree of Master of Arts is able to construe a Greek play. The thing is absurd on the face of it. My learned friend had the degree of his college, as most of us had, when fellows of the university. Supposing he were to write his own name, or your, or I mine, with the degree which we fought very hard for when we were young, and thought a great deal more of then than we do now—could it be said that by that we were bringing ourselves within the purview of an Act of Parliament, and holding ourselves out as persons specially qualified to practise law on the one hand, or divinity on the other, or classics and mathematics? Nothing of the sort. I am fighting this on Dr. Huntley's case now, but Dr. Coe's case is the same. Dr. Huntley's case is this: I came from America; it is perfectly true that in America it is believed more attention is given to dental surgery than in England; it is believed that people in America need dentists more than we do, whether it is because of the hot mixtures they partake of or not, I know not, but they make a particular study of it, and they have degrees for it. I think I am right in saying—if I am wrong I am very sorry—that at no university in the United Kingdom is any degree in dental surgery or dental science given. These gentlemen may be Englishmen for all I know to the contrary, but many Englishmen go over to America for the sole purpose of obtaining that degree as a testification that they know their work, and that they are really competent students and scientific men. My learned friend says that these words mean that he is a person specially qualified to practise dentistry. I thought when my learned friend rose the last time, he would try and give your worship some definition of the words "specially qualified." You will observe how it is put in the preamble and in section 3. What is the meaning of it? You must give some meaning to it. It is not "qualified" only. Why should they put the word in twice? Is it possible to read that in any other way than that from the beginning to the end it deals with certain bodies. Section 1 says that the Act may be cited as so and so. Then section 2 gives some colour to the Act; it mentions the General Council, the Branch Council, the medical authorities and the local Registrar. It is clear it is a registration Act from beginning to end, and not an Act dealing with people's competency. It deals only with the question of registration. That is made still clearer when you come to section 6. I will not weary your worship by reading that again. From that moment it is registration all the way through, and there are certain provisions for the examination of young men who wish to come in under sub-section 1 of clause 6, but that I have nothing to do with.

MR. R. E. MELSHEIMER: Section 6 does not use the words "specially qualified."

MR. WADDY: No. I think my friend has made an unfortunate observation there. It does not use the word "specially." Why? It does not use the word "qualified."

MR. R. E. MELSHEIMER: It is in the side note which is part of the section.

MR. WADDY: Does my learned friend mean to say that a side note is part of a section?

MR. R. E. MELSHEIMER: It has been held to be so.

Mr. WADDY : If that be so, it is stronger for me than ever, because, if I am to take it that the qualification in the side note means the same thing as special qualification, what is special qualification? My friend says that the word "special" is not used there. To which I answer, "No, nor is there the word 'qualification.'" Then my friend says it is in the side note. My answer is that that does not control the substance, but supposing it does control the substance, then my learned friend is done for, because if qualification in the side note means the same thing as special qualification, what is special qualification? I would not have said a word about it except that my friend drew attention to it. But observe Clause 6—"Qualification necessary for registration." It is conclusive against my friend. There is no qualification at all as to ability or as to competency, and the only qualification is in the last line of it, "shall be entitled to be registered." If I am right in my version of it, which I venture to think I am, it is clear that the qualification there, is the qualification of the man who is entitled in one of three certain ways. In not one of these three ways is either of my clients entitled. In none of these ways, therefore, are they qualified.

The MAGISTRATE : Were they not qualified under the 9th section having obtained a certificate?

Mr. WADDY : No, because they only recognise the certificates of Harvard and Michigan.

The MAGISTRATE : The words are, "as hereinafter defined." Where is that?

Mr. R. E. MELSHEIMER : That is in the following section 10.

The MAGISTRATE : I am looking at the statute. The 10th section says, "The certificate granted in a British possession, or in a foreign country, which is to be deemed such a recognised certificate as is required for the purposes of this Act, shall be such certificate, diploma, membership, degree, licence, letters, testimonial, or other title, status or document as may be recognised for the time being by the General Council," and so on.

Mr. WADDY : That is my point.

The MAGISTRATE : Therefore they could not have got registered. That is how you put it.

Mr. WADDY : I say they could not. I began by saying, and I stick to it and maintain it, that this is a roundabout way of trying to stop these gentlemen from practising at all, although they know that this Act was never intended at all to stop such gentlemen practising. They say, we cannot stop your practising, we will stop your calling yourselves even by the University name which you are entitled to until you are registered, and we know you cannot register. If they had common sense, this British Dental Association, whoever they are—these Tailors of Tooley Street, so to speak—would recognise important universities like those to which these two gentlemen belong, which are as good as any in this country, and better with regard to this particular subject. There would be some common sense in that : but the scheme is practically to impose on these gentlemen an incompetency which does not apply to them, and to prevent them from practising what they are qualified to practise.

The MAGISTRATE : You say you have made out that they are not persons specially qualified.

Mr. WADDY : Yes, that neither of these gentlemen is a person

specialy qualified to practise dentistry within the meaning of this Act. Specially qualified may mean anything. It may mean a man with a strong arm to pull teeth out, but within the meaning of this Act specially qualified they are not. Then, sir, the next point is this, which refers to Dr. Coe. I believe these two gentlemen are perfectly ready and willing to stand or fall together as brothers in arms. But there is this distinction between them. With regard to Mr. Smith, I am prepared to shew that that which he has stated is utterly false as concerns Dr. Coe. I cannot do that with regard to Dr. Huntley, because I cannot unseal Dr. Huntley's lips as to what took place when he and Smith were alone. What they have got to do is this—not only to shew that these gentlemen used "D.D.S." but that, in addition to that, they are not entitled to take or use the name, and, therefore, they have got to shew that Dr. Coe used the name. The way in which they try to do that is through Smith. What Smith says does not sound like a probable story. I think you will agree with me that Dr. Coe is at all events a man of intelligence. Smith, according to his statement, said to Dr. Coe, "I have been informed by Dr. Huntley," so and so, "is that so?" "Yes," said Dr. Coe. Then according to him Dr. Coe admitted this pamphlet, the object being to bring him within the meaning of the words of the Act. There is not a particle of evidence to shew against Dr. Coe that he used that except you are inclined to believe the evidence of Smith.

The MAGISTRATE: It would be some evidence. I only throw this out for you to consider. If a man lives in an establishment and a pamphlet is circulated in that establishment, and his name appears on that pamphlet, there is a very strong *prima facie* ground, without any words on his part of admission, or otherwise, from which you can draw the inference that he was not living in that establishment without sanctioning the use of his name in the pamphlet.

Mr. WADDY: That is so. I bow to that at once. [A pause.] I have consulted my client who represents both these gentlemen, and I believe from the way in which they look at me while I speak both of them agree with me, that this is a deeper question than the mere contradiction of Smith, and a more important one; and I think that their better plan, if they put themselves in my hands, as I believe they will, and in the hands of the gentleman who instructs me, is to leave the matter where it is. I do not care about what Smith has said. I recognise the importance and force of what you have said with regard to this, that if they stand by, to use a common phrase, and allow this thing to be done, that may be some taking or using sufficient to ground the prosecution. My objection is a deeper and more important one. All that can be said of Dr. Huntley is this. I will assume strongly against myself that Dr. Huntley has been a party to the printing and using of these words, "Dr. Huntley, D.D.S. (Pennsylvania University)." Every word and letter of that I allege to be accurate and true. There is no suggestion made that it is not. I say that "D.D.S." is unknown to English law and to England. It is an American degree conferred, meaning doctor of dental surgery, which we have not in this country. I say that being so, it is not a holding out of himself in this country as being a person qualified to practise dentistry. It is the statement of the fact that he has successfully undergone an examination of an important character in a foreign university, and that he has triumphed there over the wiles of

the examiner who examined him ; and he does not suggest that he is, either here or there, a specially qualified man, within the terms of the Act, to practise dentistry.

The MAGISTRATE : I assume that the title means that he got that degree of Doctor of Dental Surgery in Pennsylvania.

Mr. WADDY : Yes, sir.

The MAGISTRATE : Or does it mean that he got a degree and calls himself "D.D.S." simply ?

Mr. WADDY : We have no evidence on that point. Mr. Smith says, "I asked him what this D.D.S. was, and Dr. Huntley said, 'It means doctor of dental surgery.'"

The MAGISTRATE : I assume it means doctor of dental surgery. The whole question is, as far as I can make out, does "specially qualified" mean specially qualified by the law of this land, or does it mean qualified in the widest and most general sense. I have not read the Act yet, but the question is one of such consequence that I should like to read the Act all through before I give my decision upon it.

Mr. WADDY : Far be it from me, sir, to attempt to deny you the pleasure of reading through the Act, but you will not, I think, get much light from it. There is a good deal about examinations, and so on.

The MAGISTRATE : I think the question is so important a one that I do not like to give my decision off-hand. I will do so this day week.

Mr. WADDY : I do not know whether my learned friend and I could not possibly agree to suggest a course to your worship which, if you thought it desirable to take, might possibly save further trouble.

The MAGISTRATE : If I decide that they come within the Act, you can fight out the question of fact. If I decide that they do not come within the Act, then there will be an end of the prosecution.

Mr. R. E. MELSHEIMER : I understood my learned friend to withdraw the dispute on the facts. Let us clearly understand one another before we part to-day.

Mr. WADDY : I do not think, after what I have said, I should be justified in taking that course.

The MAGISTRATE : Then it is entirely limited to the legal question.

Mr. WADDY : Yes, sir. As I said I would withdraw the matter with regard to the dispute of fact, my friend is entitled to hold me to that. If you should be of opinion that we are right, then the application will be dismissed. If not, then there will be the question of the penalty alone which, under the circumstances, I shall leave to you without one more word. As you have already said, it is not the case of some ignoramus practising. The simple question is, whether they are technically within certain words.

Tuesday, August 21st, 1888.

Mr. LEWIS DAVIS : Sir, I appear to-day in the absence of the learned counsel for the defendants in this case.

The MAGISTRATE : Are all the parties here now ?

Mr. LEWIS DAVIS : Dr. Huntley is here.

The CLERK : Is the other defendant here ?

Mr. SMITH : I believe not.

The MAGISTRATE : Who appears on the other side ?

Mr. SMITH : I do, sir. I am the informer. Will your worship allow me to call to your notice a case which is on all fours with this, where exactly the same letters were used ?

The MAGISTRATE : If the parties are here I will deliver judgment at once, and I will hear any application you have to make afterwards.

Mr. SMITH : It is not an application, sir. I wish to mention to you a case which is exactly on all fours with this.

Mr. LEWIS DAVIS : May I interrupt ? My friend, I understand, is not going to refer to any judicially reported case ; I do not know really what he is going to refer to. We are only here to-day, as I understand, to hear your worship's judgment.

The MAGISTRATE : That is true ; but still at the last moment I should be glad if any light could be cast upon the matter by the decision of any superior Court.

Mr. LEWIS DAVIS : What my friend wishes to refer to is not the decision of any superior Court.

The MAGISTRATE : Is it not ? What is it ?

Mr. SMITH : It is simply a case before the magistrate at Stratford.

Mr. LEWIS DAVIS : I do not know which way it goes, but it is rather hard on me that this should be mentioned at the last moment.

The MAGISTRATE : I have, of course, the greatest possible respect for the decision of any other stipendiary magistrate, but I do not think I ought to delay the decision in this matter unless it is proposed to give me the authority of some superior Court.

Mr. SMITH : It is not any argument.

The MAGISTRATE : I will now give my judgment. The question here is whether the defendants, by describing themselves as "Doctors of Dental Surgery," of Pennsylvania University and Boston College, respectively, have used titles implying that they were registered under the Dentists Act, 1878, or that they were "specially qualified to practise dentistry." In either case since they were not, in fact, registered, they would be liable under the 3rd section to a penalty of £20. The Act seeks to protect the public against quacks and knaves by the following among other provisions. Persons styling themselves "dentists" must be on the Register, and are liable to be struck off for misconduct. Before being registered they must satisfy the General Registrar that they have proper certificates of competency, and only such foreign certificates are admissible for the purpose as are recognised in a list published by the General Council. Now certificates from Pennsylvania University and Boston College are not included in this list. I think, therefore, that the defendants cannot be said to have used titles which imply registration. And the only remaining point is whether the titles imply a special qualification to practise dentistry. It is argued for the defence that the words "specially qualified" must be restricted to recognised qualifications, such, for instance, as D.D.S. of Michigan, or D.D.M. of Harvard. But this would go far to cripple the Act, for the only titles verbally specified in the 3rd section are "dentist" and "dental practitioner." If, therefore, any person by merely substituting such equivalents as "dental surgeon" or "doctor of dentistry," or, as the defendants have done here, "doctor of dental surgery," could escape, the protection to the public would be slight indeed. On the other hand if the Legislature meant to enforce registration on every one using a title, which implied that he was specially

qualified to practise dentistry in any way whatever, the person supposed would come within the Act as effectually as if he styled himself a dentist, or dental practitioner. The latter seems to me the most rational view, and I, therefore, convict the defendants. Mr. Waddy has dwelt upon the hardship of their particular diplomas being unrecognised as titles to registration. But, before practising here, I do not see why they should not have qualified by the means open to English dentists. Taking into consideration, however, that the clause might have been more clearly expressed, and that no question has been raised as to the right of the defendants to the designations they have adopted, I think it will be sufficient to impose in each case a fine of £5.

Mr. SMITH: And costs, I take it, your worship. We do not ask for any large costs, but we do ask for costs.

The MAGISTRATE: No, I do not think it is a case for costs.

Mr. LEWIS DAVIS: It is a very hard case.

The MAGISTRATE: You mean in order to carry the solicitors' costs.

Mr. SMITH: Yes, simply nominal costs we ask for. We do not ask for large costs.

Mr. LEWIS DAVIS: This is a kind of test case.

The MAGISTRATE: I can only give the ordinary costs. There will, therefore, be a penalty of £5 and 2s. costs in each case.

Mr. LEWIS DAVIS: I am instructed, sir, to apply for a special case.

The MAGISTRATE: Certainly, I will grant that.

HOSPITAL REPORTS AND CASES IN PRACTICE.

Notes of Two Cases of Epulis. Removed at Exeter Dental Hospital.

By J. M. ACKLAND, M.R.C.S., L.D.S.Eng.

ON Feb. 3rd, 1887, J. H., female, aged forty-two, presented herself at the Exeter Dental Hospital, complaining of a gradually increasing swelling in the lower jaw, a model of which I now show. The front lower teeth had many cavities in them near their necks, and it seemed to be principally from the neighbourhood of these that the growth sprang. It was firmly adherent to the jaw over a large area, and was little, if at all, pedunculated. It had been growing some eight months, and was very hard on manipulation. The upper teeth closed on it, and were no doubt a source of constant irritation. I decided to remove it, and the patient being placed under the influence of chloroform, I extracted all the teeth from the right lower canine to second left bicuspid. The patient was in the prone position, and the left lower canine was a troublesome one to remove. The hæmorrhage was considerable from its socket, insomuch that nothing but the cautery,

which was close at hand, seemed to arrest it. I then freely removed all the growth with a scalpel, and having well scraped the bone with a rasp, I cut away all the alveoli with excising forceps, for the epulis could be easily traced down into each socket. I then finally passed a Paquelin's cautery over the surface thus laid bare.

The second case was on July 15th, 1886. E. P., female, aged twenty-one, with an epulis in lower jaw. It had been growing some two months, and after extracting the right lower molar stumps and second bicuspid, I treated this in a similar manner to the former case.



I claim nothing original in either of these cases or their treatment. There can be no doubt of the advisability of freely removing the periosteum, for I have on more than one occasion seen these growths recur, because they were really not entirely removed, and bearing in mind they grow with increased vitality under these circumstances, it is well to err on the safe side, and remove too much, rather than too little.

I have lately seen both patients, and there is no recurrence. I may add, I treated a private case in a similar manner about three months ago, and in this the result so far is equally satisfactory.

I need hardly say that when the cautery is used ether should not be the anæsthetic employed, as explosions have been known to occur.

Ethylate of sodium seems to be of use in the smaller growths, but I have had no great experience with it.

REPORTS OF SOCIETIES AND OTHER MEETINGS.

The Edinburgh Dental Hospital and School.

THE half-yearly meeting in connection with this hospital and school was held on Wednesday, 25th July, at 30, Chambers Street, Edinburgh, Dr. Symington presiding.

The report for the session, submitted by the Dean (Mr. Wm. Bowman Macleod), stated that it was gratifying to note by the influx of students at the terms of November 1887 and May 1888, that the course of instruction given at the school was growing in professional as well as public estimation. Besides the usual number of entrants from what might be termed outside sources, the number of those of dental parentage or connection was quite marked. It proved that those who best knew the needs of the dental aspirant, recognised the fact that a systematic course of instruction under approved teachers was the proper training for all entering the profession. The retrospect of the session was on the whole exceedingly encouraging. The attendance of the pupils had been regular, and their attention to work had been intelligent and enthusiastic. If the seniors had done well, the juniors had done better, and to them belonged the honours of the year. Not only had all of them given due attention to the special departments in connection with the school, but several had further distinguished themselves by carrying off the highest honours in the medical classes. The prizes in connection with their own department, the Dean added, had been keenly contested. Regarding the successful students to whom prizes were thereafter presented by the chairman, it was stated that the senior prize for hospital work had been secured by Mr. Thomas Gregory, who in a former year gained the junior prize. In the junior division, the work of Mr. F. J. Bonnalie and Mr. A. H. Brittan had been so meritorious and so equally balanced that the adjudicators could not do otherwise than give them each a medal; while the third, Mr. J. S. Allan, had run them so close that he was awarded a certificate of honour.

In the systematic courses the prize takers were—in dental anatomy and physiology, Mr. W. Gray. Owing to the closeness of the competition, a special prize was awarded to Mr. H. Brooke Dew.

On the motion of Dr. SMITH, seconded by Mr. MATTHEW FINLAYSON, the report was adopted.

The CHAIRMAN, after presenting the prizes, congratulated the students on the profession they had chosen. The diagnosis in dentistry, he stated, was simple, the treatment effectual, more so than in other branches of the profession. With reference to the school accommodation, which he stated was inadequate, he had no doubt that it would soon be remedied. He believed the school was unrivalled in every respect except accommodation.

The administrative committee of the Edinburgh Dental Hospital are at present negotiating the lease of more extended and suitable premises.

NEW INVENTIONS.

Wirth's New Apparatus for Moulding and Vulcanising Rubber, and Baking Celluloid.

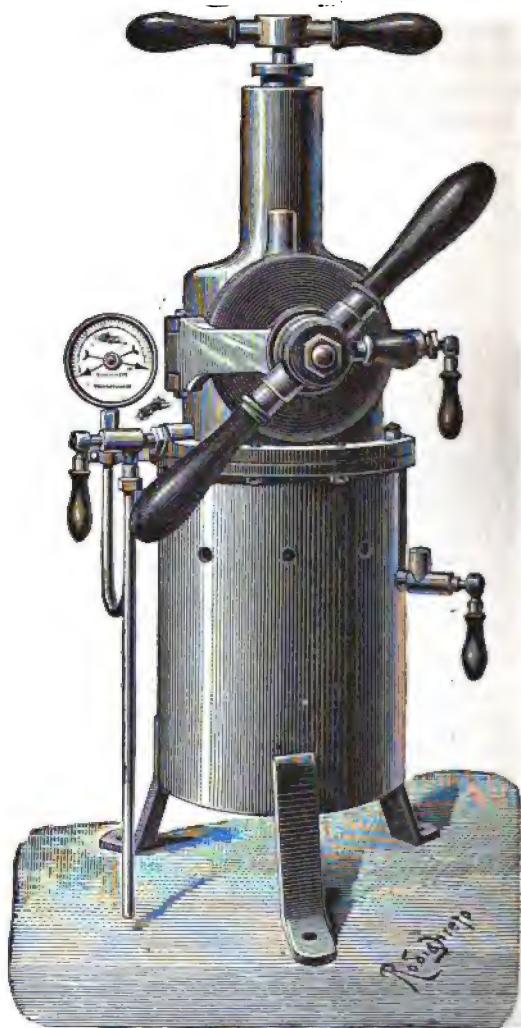
By GEO. CUNNINGHAM, B.A., D.M.D., L.D.S.

THE ordinary vulcanisers at present in use may be described as being all single-chambered water bath apparati, the principal difference between them being the various modes of securing the cover. The type of the recent development in vulcanisers evidently is the provision of a second and separate chamber for cooking purposes.

Campbell's New Mode Heater inaugurated the new type, but does not seem to have been altogether a practical success in the hands of the profession at large. The Seabury vulcaniser seems the best and most practical of the double-chambered vulcanisers now in the market, but its cost of £40 is almost prohibitive of its general use.

Monsieur Wirth, of Paris, without any knowledge of the existence of the Seabury vulcaniser, has devised one which seems to have all its advantages without being so complicated, besides possessing others which are peculiar to it, such as the facility which comes from access being gained to the vulcanising chamber from the side and not from the top. It also is anticipated that it will be possible to manufacture and sell this machine at about half the cost of the Seabury apparatus.

The vulcaniser consists of a generating and vulcanising chamber, both made in gun metal of such strength that they are capable of withstanding a minimum pressure of thirty atmospheres.



The generator is furnished with a supply tube and tap which is so arranged that it cannot be filled above the proper level. The

amount of water it contains is about five litres, which provides more than sufficient steam for a whole day, and so the vulcaniser is always ready for immediate use on the introduction of the flasks.

It is heated by Fletcher's gas burner, the supply pipe of which is in communication with a gas regulator, controlled by a spring manometer (Gartrell's system), attached to the vulcaniser. The gas supply is thus effectually regulated according to any pressure that may be desired without the possibility of its going beyond it.



A small flame is quite sufficient to keep the machine ready for action during the whole of the day. The advantage of a gas regulator, as the means of maintaining a regular heat, over that of the thermometer is evident, since, from its acting by steam pressure movement, it must be positive and reliable. A given

steam pressure is the result of the application of a constant amount of heat which is immediately indicated by the diaphragm of the regulator.

The generator is also furnished with a safety valve which is capable of being adjusted to respond to any required pressure, but is usually set so that when the temperature reaches 180°C . the steam will escape. Such an arrangement is obviously preferable to that of the stereotyped unreliable and deceptive fusible metal plug.

The generator is connected with the upper or vulcanising chamber by a pipe controlled by a tap on the right of the machine so that the steam can pass from the one chamber into the other, or can be confined to the generator under normal pressure, while the other chamber is emptied.

The closure of the cover, or rather door, of the vulcanising chamber is quite a novel feature, and is regulated by a system of combined screw and bayonet movements, something like that used for closing the breach of a cannon. The present system of closing will be considerably simplified in future machines. Unlike other vulcanisers, this cover is not removable but works on a strong solid metal hinge, thus facilitating manipulation, and from the opening being on the side permitting a full view of the interior of the vulcanising chamber, which is extremely roomy and spacious. The upper chamber may be used simply as a hot-air or as a superheated steam chamber.

It is also furnished with a strong press which passes through the curved top and enables the flasks to be closed in the heated chamber without the slightest danger of fracturing the plaster or defacing the teeth, since at a temperature of over 115 degrees the rubber is compressed when in a state of soft paste.

A tap on the left of the vulcaniser enables the steam to be let off by a pipe, furnished with an adjustable tube which passes into a pail of water, thus providing an efficient condenser for the waste steam.

M. Wirth has also invented a special flask for use with this vulcaniser. It is almost roomy enough to contain two pieces, but its principal feature is a spring in the cover which enables the flasks to close automatically within the vulcaniser when the two parts are brought together under the influence of the press. In this way artificial dentures may be vulcanised and allowed to cool under pressure without even the intervention of the press in the vulcaniser.

The vulcanising taking place in the super-heated steam the plaster in the flask remains hard and never becomes soft, as is so frequently the case in the ordinary water bath vulcaniser.

It is claimed that by vulcanising in such a chamber the rubber possesses its maximum of elasticity and solidity, and is susceptible of a very high polish. The colour of the rubber seems also to be better than that produced in the ordinary vulcaniser. Rubber vulcanised in this way is not only tougher but makes a closer union with the teeth and requires less time to vulcanise and finish. By burnishing heavy tinfoil to the trial plate the rubber may be made to come out of the vulcaniser practically finished.

The apparatus is also capable of being used for celluloid.

As an instance of the high quality of workmanship, I may mention the fact that the cover is so nicely adjusted to the vulcanising chamber, that no rubber or leaden washer is necessary to prevent the escape of the steam.

The facility afforded by such an apparatus, ready at all hours of the working-day for immediate use, must be especially apparent in the case of repairs and additions which must frequently be executed with a minimum expenditure of time. I have only had the opportunity of using it for a few days in my own laboratory, but that short experience was sufficient to demonstrate its immense superiority to the ordinary type of vulcanisers. M. Pinson, of Paris, who has the only other machine at present in use, expresses himself enthusiastically as to its qualities after an experience of six months, and says he has put aside his old machines entirely in favour of the double-chambered vulcaniser.

ANNOTATIONS.

THE address of Mr. Corbett has an interest exceeding that which usually attaches to reminiscences, for one reason that it goes further back than such retrospects generally do, and for another that these tales of a bygone world were told to us first hand. There is a great magic in the special span of time of which Mr. Corbett spoke. It is hardly to be supposed that we shall often meet with a hale and hearty gentleman in active practice, appreciating and criticising as an expert all the triumphs of modern science, who can commence the story of his early days of bread-winning with the title of Sir Walter's first novel.

"'Tis sixty years since." We see men superannuated and retiring who were not born when our president was hard at work at the bench, combatting those pristine difficulties. The story of those days, told by a practical expert who remembers them, has a far more interesting flavour to most of us than even the pre-historic dentistry of which we hear and read from time to time. Our President said that except for his long years of practice he could not see what he had done to merit the Presidential Chair. It may be fairly asked, if a more honourable title to the respect of the younger generations of dentists can be found, than that of a long life devoted to the upright practice of our profession.

At the dinner of Fellows and Licentiates of the Irish College many good things were said that must be unreported, but one suggestion fell from the lips of an important speaker which seemed to us of importance to the profession. It was this, that the time might not be far distant when a dental surgeon should occupy the coveted honour of presiding over that great section of the surgical world, the College of Surgeons in Ireland. Such an honour has already been won for our profession by Dr. Smith, of Edinburgh, and should the Irish College choose for their president one of our calling, the fact that a dentist stood so high in the estimation of his surgical *confrères* could not fail to have a good influence upon all who follow our calling, while it would be evidence to demonstration in the eyes of the outside public that we form an honourable branch of surgery. The man is ready for the post ; the vice-president of the Irish Branch, if we may judge by the loud "calls" for him when the remark was made, is popular with all, and could not fail to fill the post with dignity and ability.

NOTHING has been said hitherto of the catalogue of the first Annual Museum. A catalogue is a thing most people take for granted ; they are angry with it if they find a mistake, but if it is all correct it passes without notice, and yet scarcely in any other department is so much hard and uncongenial work to be done as in its compilation. It has been said that a woman is well-dressed when every one is pleased but no one notices exactly what she wears. So it is with catalogues ; if no one notices anything it is a good catalogue, and as we heard no comment on this one we gather that it fulfilled its promises. It is the first, we hope, of a

long series, and for general accuracy and completeness will take a lot of beating.

WE are glad to hear that a large number of gentlemen who exhibited specimens at the late Annual Museum, have presented their specimens to the Museum of the Dental Hospital of Ireland. To judge from the ingenuity and completeness of the arrangements for exhibiting them, we must say our Irish friends deserve to have good specimens, and should any more members determine, as we hope they will, to follow this example, they may be sure that not only will a great deal of trouble be saved, but also that the objects will be carefully arranged, well shown, and thoroughly appreciated. Under any circumstances no one must be impatient about getting their specimens back; the Irish Executive need, as much as they deserve, their well-earned holiday. Under no circumstances will specimens be returned unless a request for their return be addressed in writing to the Hon. Sec. of the Museum Committee.

THE demonstrations were exceptionally good this year, although this department is always full of interest for practical men. The able and courteous chairman of the demonstration committee, Dr. Robert Hazelton, performed his duties of arrangement and supervision with great completeness, and it is needless to say that Dr. Theodore Stack, as hon. secretary to the committee, did his share, and probably more than his share, of work.

WE notice with regret that a large number of letters of invitation addressed by the Committee of Irish Fellows and Licentiates, for the dinner on the 22nd August, were returned through the Dead Letter Office. It would seem as if, in despite of the exertions of the Registrar, and the pains taken by Mr. Waite, of Liverpool, to spur people on to send their right addresses to the Registrar, the strange indifference and apathy in this matter, of which we have so often complained, is by no means a thing of the past.

THE subcutaneous injection of a solution of antipyrin (30 to 50 per cent.) is said by several observers to give excellent results as an analgesic. The effect appears in a few seconds and lasts several hours. Dr. Merton (Lyon Médicale) suggests the addition of this agent to the cocaine solution used for dental purposes. His formula is cocaine 4, antipyrin 40, water to 100. The

anæsthesia produced is somewhat slower in coming on, but is very complete, and lasts longer than that produced by cocaine alone. It is therefore much more effectual in relieving the pain of periostitis, &c.

IN our report of Mr. Arthur King's operation with cocaine we stated that he employed one grain; it should have been one minim of a 10 per cent. solution.

WE are requested by Mr. W. H. Waite, of Liverpool, to make the following correction of an error in our last issue:—At page 504, fourth line from the bottom, for "none" read "some."

OBITUARY.

Mr. W. V. Moore.

WE regret to announce the death on Tuesday, the 5th inst., at Plymouth, of Mr. W. V. Moore, at the advanced age of seventy-two years. Mr. Moore was a Licentiate of the English College in 1863, and a member of the Odontological Society, and of the British Dental Association, and one of the earliest members of the Western Branch, for which he acted as hon. secretary for several years. Mr. Moore was esteemed and respected by all who knew him, and will be sincerely regretted by his fellow practitioners.

We also regret to have to announce the decease of the following gentlemen:—

Mr. J. MAULE YOUNG, Glasgow, died 15th July, 1888.

Mr. T. RUSSELL CAMERON, Paisley, died 19th August, 1888.

Mr. JAMES TRACEY, Glasgow, died 2nd September, 1888.

NOTE.—ANONYMOUS letters directed to the Secretary of the Association cannot receive attention.

P.O. Orders must be accompanied by Letters of Advice.

Communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

Subscriptions to the Treasurer, 40, Leicester Square.

All Contributions intended for publication in the Journal must be written on one side of the paper only. The latest date for receiving contributions for the current number is the 5th of the month.

SPECIAL NOTICE.—All communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

THE JOURNAL
OF THE
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A
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American Dentistry.

WE publish in this issue of our Journal, two statements of opinion, coming from distinct sources, which we welcome with genuine feelings of gratitude. Both of these statements proceed from America, and both of them deal with the subject of the unprincipled and shameless deceits that are daily practised upon the British public under the convenient masquerade costume of "American Dentistry." A few months ago we spoke out our mind pretty plainly upon this subject, and we called upon all men who had any respect for honesty as a guiding principle in professional life and who had any real right to describe themselves as American dentists, to speak out the condemnation they could not but feel of the frauds that were being perpetrated by unscrupulous dishonesty under the cover of the title of this article. We had little doubt, from what we know of our American brethren, that the answer would be prompt

and to the point, and our hopes in this respect have been fully realised. The *Dental Review*, which is an independent journal, and says what it thinks is right without fear or favour, and is moreover conducted by a select body of American practitioners of high repute, has replied to our challenge exactly as we should have expected from a journal conducted by scholars and gentlemen untrammelled by ulterior considerations. They have—speaking as we fully believe, the opinion of every respectable American practitioner—most freely disavowed and condemned the things that are being done and advertised in the American name, to cajole money out of the pockets of the very susceptible British public. Our readers will find, at another page, what reputable Americans think of disreputable pseudo-Americans; and when they are asked what American dentistry means in the leaflets and pamphlets that are being scattered broadcast by the quack advertisers, they will find the opinion of upright and respectable American dentists upon the point stated both forcibly and pithily in the August number of the *Dental Review*. Such an opinion coming from a source absolutely beyond the reach of a suspicion of bias or prejudice cannot fail to open the eyes of those who are deaf to our expostulations.

This is, however, not all the response we have received. We publish in our correspondence columns a letter addressed to us by the Secretary of the Harvard Dental Alumni Association. This distinguished body pronounces with no uncertain sound against the abuses of which we have complained and, with that practical promptitude which generally characterises our transatlantic cousins, suits the action to the word by suspending certain offenders from membership, so long as they continue to violate the principles of the Association.

Without doubt we shall have more good news before

long to lay before our readers. Already vigorous action is being taken in many quarters, and we cannot but reflect with a certain pardonable pride upon the fact that this general awakening to the position of affairs and to the mischief that quacks are inflicting upon the repute of American practitioners, is in some measure to be traced to the outspoken protests of the JOURNAL OF THE BRITISH DENTAL ASSOCIATION. For the benefit of those of our readers who do not see that excellent journal, we subjoin the article from the *Dental Review* (Chicago):—

“Americans in England.

“Our esteemed contemporary the JOURNAL OF THE BRITISH DENTAL ASSOCIATION in the July issue says very justly that scientific dentistry knows no country, and deplores the fact that unscrupulous and mercenary individuals are forming limited liability companies in England on the pretext to furnish the Britisher with ‘American dentistry.’ It is deplorable that a certain class of men, regularly graduated from some of our best dental schools in America, will lend themselves to these ‘institutes’ now springing up in London, and in so doing, not only degrade themselves and bring reproach upon the colleges certifying to their fitness to practise, but drag in the dust the reputation so hardly gained by our best men in foreign countries.

“Ethical principles are totally ignored by them, and it would seem that the best thing that all respectable Americans could do, would be to give them the cold shoulder, not alone in professional, but in private life as well.

“This stigma it is hoped will be frowned upon by the English Medical Council and the Prosecuting Committees of the British Dental Association so forcibly, that permits to practise the art and science of dental surgery will not be issued by the authorities, unless the holder of the legal right can show his respectability in a manner so satisfactory, that no one will have cause to blush when a dentist is known to have hailed from the United States.

"We are opposed to quackery both at home and abroad, and hope to see the day when the old practitioner as well as the recent graduate, will be found to say that his practice was built upon merit and respectability, and not upon the lavish use of printers' ink, misrepresentation and fraud."—*Dental Review* (Chicago).

ASSOCIATION INTELLIGENCE.

The Annual General Meeting.

(Continued from page 625.)

Dr. R. THEODORE STACK (Dublin) read a paper on "Dental Ethics" (see page 698).

Mr. W. BOOTH-PEARSALL (Dublin) said it would be of the greatest possible service to their profession, if their Representative Board would tabulate a code of ethics. They were not all born with the same advantages, and when men in their eagerness or selfishness forgot those little amenities which made life run so smoothly, professional relations were apt to become strained. The question should be considered in its broadest aspect, and a code tabulated which would last for years. Some years ago the Shropshire Branch of the British Medical Association tabulated a code of ethics by which many a dispute was afterwards settled. In the Army and the Navy, where etiquette reached its extreme development, everybody knew what he was bound to do towards his colonel, his major, his captain or his lieutenant; and the result was that official courtesy was carried out with the greatest precision. He did not see why the same precision should not be characteristic of their members. He trusted that this paper would not be left in a pigeon hole to moulder, but that a report upon it would be presented at the next annual meeting.

Mr. J. SMITH TURNER (London), said that the question of dental ethics was rather an intangible one. They might talk about it, but it seemed to elude their grasp, and it was very difficult to convey anything definite on the subject. He had an opportunity some time ago of addressing an assembly of students at a prize giving in London, at which he had been invited by Mr. Smale, to distribute the prizes; and in his remarks he strongly advocated classical education. Education might be extended in scientific directions, and physical science, anatomy, physiology, and other

things taught, but unless it was also calculated to refine men's modes of thought, and their relationship to each other and to their patients, it would be far away from the mark of an educated gentleman. He believed that this kind of education was alone to be found in the classics. It was an axiom commonly received that when they made laws they made offences, and that the greater the number of the laws the greater would be the number of offenders. There was this difficulty about any code of ethics, that it would need to be interpreted. No matter how cunningly and speciously devised the code might be it would always receive an interpretation according to the character of the individual who read it, and unless that individual possessed the mental characteristics to which he had referred, he was afraid that the code would not prove very efficient.

Mr. McCLEAN (Dublin), said that in many of Dr. Stack's statements he heartily concurred. There were one or two points, however, on which he thought there was room for difference of opinion. Instead of having a report on the subject at the next annual meeting he thought the better way to ventilate it would be by discussing it in the pages of the Association Journal. In that way they could get the opinions of different members and different branches. The question of giving gratuitous services to the members of the medical profession in the hope of obtaining custom was one that would give rise to discussion. It was done by several men; and he considered the motive an extremely immoral one. It would be satisfactory to have some rule on the subject. The subject of the administration of anæsthetics might also be discussed in the pages of the Journal.

Mr. BLANDY (Nottingham), did not think it possible to discuss this subject by pouring letters in upon the poor editor of the Journal.

Mr. GEORGE CUNNINGHAM (Cambridge) said there was no point of more interest to the members generally than the question of fees. He concurred with Mr. Blandy that the editor of the Journal would never be able to find room for a discussion by letters of the subject now before the meeting. It would be much better for the branch societies to take it up and report definitely on it; and in that way they might be able to find out whether any code of rules was desirable or not. But of one thing he was certain, namely, that a discussion of the subject would do much to improve the condition of the profession, both as regarded their relations to the medical profession and to their patients.

The meeting then adjourned for lunch. On resuming

Dr. ANTHONY H. CORLEY, F.R.C.S.I., Dublin, read a paper on "Anæsthesia" (see page 700).

The PRESIDENT said it was quite unnecessary for him to remark upon the deep research exhibited in Dr. Corley's paper, and the interesting details which it embodied. The subject was, of course, one provocative of considerable discussion.

Mr. R. N. H. KING (Newark), said it had been stated that four teeth had been extracted during one inhalation of nitrous oxide. He believed that many more than that might be drawn under a single inhalation provided they were not difficult of extraction. The practice of administering ether *per rectum* had not been referred to. There might be objections to it, but still it was wonderfully effective according to his experience. On the preceding day he extracted fourteen teeth, using ether in that way. The ether was boiled and the vapour administered through a tube; and in two minutes after the boiling point had been reached the ether could be smelled from the patient's breath. After seven minutes the patient was under the influence; and the operation lasted twenty minutes. He had another case of the removal of a polypus under ether which took rather longer.

Dr. PEARSALL: What is the *modus operandi*?

Mr. KING: You have an ordinary enema tube and you put the ether in water. It boils at a very low temperature; and as it keeps evaporating the vapour is admitted up through the rectum.

Mr. AMOS KIRBY (Bedford) considered laughing gas by far the safest anæsthetic. On more than one occasion he had extracted from twelve to fourteen roots with it. In the face of that he did not see what other anæsthetic dentists required. He always made his own gas, and had an apparatus for the purpose.

Mr. COFFIN (London) asked whether the administration of vapour of ether *per rectum* was calculated to produce inflammation of the bowels.

Mr. KING: Out of twenty-five cases, I never knew one in which that occurred.

Mr. CLARKE (Belfast) said during the performance of a surgical operation in the Royal Hospital of Belfast, he was able to keep the patient thoroughly under the influence of the gas for eighteen minutes, and during the whole of that time no unpleasant symptom occurred. He believed the time was not far off when nitrous oxide would be generally used, not only in dental, but in surgical operations.

Mr. UNDERWOOD (London) said that cases now and then occurred in which nitrous oxide proved to be not the best possible anæsthetic. A case had recently come under his notice of very peculiar intolerance of it. After the administration began, the patient experienced a sensation of tightening round the head, which soon became so intolerably painful that after having twice submitted to the agent, she declined to endure it further, the agony was so great. Yet that patient proved a favourable subject for chloroform, and afterwards had some teeth extracted under the influence of the latter drug, but of course in a recumbent posture. It was quite true that a great number of deaths from chloroform had occurred in dental surgery, but in these the posture during administration had been a sitting one. Dr. Corley had suggested that there should be a careful examination of the heart before administering anæsthetics. There were two ways of looking at that. Such an examination might frighten the patient by suggesting heart complications that might be unsuspected and that would not influence the administration if their presence were demonstrated. He considered that there were very few heart complications capable of immediate diagnosis that would counter-indicate the administration of nitrous oxide. Certain forms of fatty degeneration which were difficult of diagnosis might be an obstacle to the use of chloroform, but on the other hand in such cases the shock accompanying the removal, without an anæsthetic, of the bad teeth, would be worse than the chloroform. On the whole, he was opposed to examinations of the heart as tending to frighten rather than to reassure. As to the number of stumps that might be taken out under nitrous oxide, thirty-two might be extracted instead of fourteen, provided they were all loose and ready to come out; whereas one old broken-down wisdom tooth might foil the operator. Every now and then the practitioner would have an operation which would require more time for its proper performance than could be obtained with the present mode of administering nitrous oxide, and repeated administrations of that gas he considered to be rather bad.

Mr. WOODHOUSE (London), said his experience had been limited to laughing gas; but about six months ago an example of paroxysm of the larynx produced by it came painfully under his notice. He and his friend and colleague, Dr. Bennett, had successfully removed a left upper molar when the patient, instead of recovering

from the anæsthetic in the ordinary manner, became quite black in the face, and after having vainly used the ordinary artificial methods of restoring respiration, they were obliged to open the trachea. They did so with a successful result, the air rushing in with such force that the sound was heard across the room. The patient made a perfect recovery. With regard to the number of extractions to be made at one time, it should be remembered that there was a healing process to follow, and if too many teeth were taken out at once there might be inflammation, and a suppurative discharge which might be swallowed with bad results. With such a safe anæsthetic as laughing gas, it was far better to take out only a few teeth at a time.

Mr. COFFIN asked was nitrous oxide more likely to produce laryngeal spasms than other agents?

Mr. WOODHOUSE said that his patient, who had the spasms, had previously suffered from an attack of rheumatic fever, which was followed by a thickening of the cervical vertebræ.

Mr. HUTCHINSON (London), said he endorsed what had been said by Mr. Underwood as to the importance of the recumbent posture when chloroform was administered. Dental surgeons would be wise if they made it a rule never to administer chloroform in their own houses at all. They should always make arrangements to have it done at the patient's own house, and the patient should be clothed in the loosest possible garb.

Dr. C. E. FITZGERALD, Dublin (Surgeon Oculist to the Queen in Ireland), said that in his particular branch, by the use of cocaine they had been able to dispense, to a large extent, with the use of anæsthetics. From what he knew of nitrous oxide he was not in favour of giving repeated doses of it.

He once extracted an eye under the influence of nitrous oxide, but he was not altogether satisfied with the result, and he never employed it again. He was in favour of examining patients before administering anæsthetics. He always did it himself as a matter of prudence. If there should be an inquest the first question that would be asked would be, "Did you examine the heart?"

Rev. Dr. HAUGHTON, F.T.C.D.: It is the first question a jury asks.

Mr. PEARSALL said he concurred with Mr. Hutchinson as to the desirability of always making deliberate arrangements for any serious operation in the patient's own house. It had been his practice for a series of years, and was desirable on the grounds

both of safety to the patient and of convenience to the practitioner. He was also in the habit of directing the patient to fast, for the occurrence of sickness during an operation was both dangerous and disagreeable. Such directions were always followed by sensible people. They should also be informed beforehand as to what things were wanted for the operation. His experience was in favour of giving ether in the way Dr. Corley recommended. Under that agent the patient got a rosy aspect, instead of the pallor produced by chloroform and nitrous oxide. He was certainly an advocate for the greatest deliberation in connexion with the employment of anæsthetics. They heard occasionally of persons who got them and yet felt pain all the time of the operation, from which he inferred that those patients had not been properly put under the influence of the anæsthetic at all.

MR. STOREY (Hull) said they seemed to be agreed that for smaller operations nitrous oxide was undoubtedly the best. He had persistently refused to administer chloroform in his own house, because he considered that there was considerable danger attendant upon the administration of it. He was in favour in prolonged operations of Dr. Dudley Buxton's practice of first using nitrous oxide and then changing to ether, the effect of the second administration being to prolong the period of insensibility to fifteen or twenty minutes.

MR. TOMES asked what was the operator to do if, after a thoracic examination, he found that there were signs of heart disease? He had two patients who had very bad aortic murmurs. One of them had been previously a patient of Dr. Wilson Fox, who always urged that he should be given an anæsthetic, as the danger likely to arise in connexion with it was less than what might result from shock and pain. That patient had taken nitrous oxide supplemented with a certain amount of ether, and had never given any particular anxiety. He had known a great many patients having mitral murmurs, who had taken laughing gas over and over again with perfect impunity. He had had more upsets with patients having mitral disease than with those labouring under aortic. Several of the former had fallen into little faints and given him some anxiety, while with the latter class he had never had any trouble at all.

THE PRESIDENT said that some years ago a lady came to him for the purpose of having a couple of stumps removed. He

applied nitrous oxide, but she did not like it and insisted upon chloroform. He yielded to her objection, and removing the nitrous oxide face piece, applied the chloroform with a napkin as recommended by Dr. Corley. The moment he put it to her mouth she fell into a complete state of anæsthesia. He made the best use of his time and took out the stumps ; but on looking at her then he thought she was dead. The muscles of her cheeks were destitute of all motion, her colour cadaverous and her skin covered with an exudation. Her husband, a clergyman, was the only other person present. He (Mr. Corbett) was thoroughly frightened ; however, after he had employed means of producing artificial respiration she recovered. He registered a vow that he would never mix nitrous oxide and chloroform again.

Dr. CORLEY, in reply, said he considered abstinence before the administration of an anæsthetic extremely important, particularly in the case of chloroform. Dr. Thomas Little was rather inclined —because chloroform depressed the heart's action—to give the patient something to eat, if he had taken nothing for twelve or fifteen hours ; but he (Dr. Corley) believed that to be wrong. The prospect of an operation was often enough to prevent a patient's breakfast from agreeing with him, and it would probably be not digested. On the other hand, he did not see any objection to the patient getting some slight stimulant, which would not sicken the stomach and would not lead to the danger of asphyxia, in the event of sickness, from pieces of solid undigested food getting into the larynx. As to making of examinations, it was his experience that patients expected them and were not at all alarmed by a stethoscope. On the contrary, the prospect of the operation was much more calculated to alarm. There was scarcely any conceivable condition of the heart in which some anæsthetic might not be given ; any heart that could bear the operation could bear the anæsthetic. But to administer anæsthetics to a patient without trying to find out whether he had mitral regurgitation or aortic obstruction, would be to act without knowing what they were doing—it would be, to use an American phrase, “ ostrich surgery.” His own experience of anæsthetics had been tolerably prolonged, and he had never given them in cases of asthma, or cases in which they would be sure to produce cerebral congestion.

Dr. A. W. W. BAKER (Dublin) read a paper on “The Annual Museum and its Contents,” which will be found at page 626 of the September number.

The Ex-PRESIDENT (Mr. Brownlie), who occupied the chair in the absence of the President, said he had been especially interested by the reference made in the paper to the collection of syphilitic teeth, a collection which had been obtained principally in Ireland. One or two of his medical friends had expressed a wish to have casts of these teeth.

Mr. BLANDY (Nottingham) said he considered that the Association were greatly indebted to Dr. Baker and the Museum Committee for this museum. He had never hoped to see one so good.

Mr. PEARSALL said it might be interesting to mention how his friends and himself in Dublin had become so interested about the museum. He (Mr. Pearsall) wrote to a member of the executive of the Association asking him to give the names of members of the profession who would collect specimens, and he received from him a very curt reply to the effect that he took no interest in the collection of curiosities. Their enthusiasm was fired from that moment, and now he hoped that gentleman would admit that curiosities had a value. They had spared no pains in the arrangement and classification of the museum to make it interesting. As one who had taken an active part in the arrangement of the museum he could say that there was hardly a specimen in it that had not cost at least a quarter of an hour's labour. He would urge the Association to have annually a museum which would be worthy of the profession. He thought he might say without vanity that they in Dublin had shown them how to do it; and he hoped they would all put their hands in their pockets and provide themselves with a set of apparatus which could be used annually for the exhibition of the specimens. But the organization of a museum in connection with the annual meeting should be the work of the whole Association and not of a few members. They in Dublin had been greatly disappointed by friends promising contributions and not sending them. However, they did not wish to exhaust all the material; and he thought there was nothing to prevent the Association having a special museum next year. He would be delighted to co-operate with his friend Mr. Dennant in the matter.

Mr. DENNANT (Brighton) said the museum they had seen was so remarkable a one that it seemed a great pity that its contents should be dispersed. It would, he feared, be impossible for a provincial town like Brighton to compete in the working up of a museum of this kind with a city which was a university centre. It

was difficult to work with men at a distance in the matter—they should be on the spot. And if they should be unable to organize such a collection at Brighton next year he hoped that the subsequent annual meetings would be so arranged as to be held in centres where it would be practicable to secure a good array of specimens. When the affair should become annual, however, he feared there would be a little more difficulty in the supplying of specimens.

Mr. WOODHOUSE (London) said he thought the question as to whether the present museum could not be preserved wholly or in part was well worthy of consideration. Many of the gentlemen who had sent specimens might be willing to give them up if they were to be kept in a permanent museum. Of course all the specimens could not be retained, as some of them belonged to the Odontological Society.

The meeting then adjourned to the following day.

Friday, August 24th.

Mr. PEARSALL read a paper on "The use of Imagination in the Design and Construction of Artificial Teeth" (see p. 708).

The PRESIDENT said Mr. Pearsall's paper might not provoke much discussion because they were so unanimous about it. He regretted that the manufacturers, upon whose skill and dexterity and inventive genius they relied so much, were not present. He hoped that they would be moved to a practical result when they read Mr. Pearsall's paper.

Mr. BROWN-MASON said that if a few members would express their feelings as to the necessity of getting decently shaped teeth, perhaps it would spur the manufacturers to supply them. The want had been felt for many years; and deficiency in the size of molars and bicuspidis had also been a fault. If the manufacturers were asked why it was they did not make rhomboidal molars of a decent size, approximating to adult size, their invariable answer was that they could not sell them. If a declaration went forth from that meeting that these undersized teeth were practically useless, it might lead to beneficial results.

Mr. BALKWILL said it should be remembered that the natural organs were implanted in a different manner from those that were supplied. Many years ago he (Mr. Balkwill) wrote on this subject, and pointed out to the manufacturers the desirability of their producing rhomboidal molars, with a better shape than the

teeth they were producing. Molars of that description had been from time to time made. He must confess, however, that a quantity of rhomboid-shaped molars which he bought ten or a dozen years ago were on his hands still. He did not think he had used more than one or two sets of them. He was afraid there was some practical difficulty connected with them, that they were not so easy to work with as the others.

Mr. J. SMITH TURNER (London), said they were now discussing the artistic shape of teeth. A few years ago Messrs. Lemale brought out a quantity of teeth of the most beautifully natural shape that could be desired. But the objection was found to them that owing to the narrowness of the neck they showed too much of the rubber in which they were set; and, furthermore, when they were set in the palate there were spaces between them. Those spaces, although they looked very natural, sometimes gave rise to inconvenience by the air slipping through the necks of the teeth and causing a whistling sound. Again, when teeth used to be mounted in plates—as was within the memory of some of the older members of the Association—the teeth were secured in the approximating surfaces and made to fit against each other, and by that means the accumulation of particles of food in crevices was excluded. But now it was one of the objections to the use of natural-shaped teeth, that an accumulation of food took place in the spaces, and it was not always convenient for the individual to remove the teeth and cleanse them. The result was a process of decomposition of the food particles and a disagreeable taste in the mouth, and where people who were not particular about the matter retained these teeth in their mouths without constantly taking them out and cleansing them, their breath became offensive. He thought that that was what brought about the present shape of artificial mineral teeth. Dentists used formerly to make teeth of the natural shape, but that practice was abandoned and the more formal shape adopted for the reasons he specified. The difficulty appeared to exist still. One great advantage attendant upon the use of mineral teeth was that the glaze was embedded in the body of the tooth, and the grain of the material was so close that the tooth might be cut to any shape that was required and polished afterwards. This he found he could do with incisor teeth of the description he mentioned. Another point was that in well-developed natural teeth the width of the canine, at its widest part, was nearly on a

par with the width of the incisor at its cutting edge. In the teeth supplied from the depots the canines were smaller, and in nine cases out of ten he had to select canines of a size larger than the rest of the set in consequence of that defect.

Mr. G. M. P. MURRAY (Dublin), remarked that in the designing of dentures a great deal of courage was required to model them in accordance with the lost tissues. Not merely had the lost tooth to be supplied, but also the alveolar process that was lost by absorption. The scientific study of a normal set of teeth in a well-formed jaw was of great assistance. It would generally be found that, in the case of the Caucasian higher races, although the axis of the front teeth was in a plane forwards and slightly upwards, the anterior enamelled surface looked forward and slightly downwards. The cutting edges of artificial front teeth might be in a right position, but if the necks were too far over it would require a great deal of boldness to model the tooth of sufficient thickness above the neck to restore the proper contour. Another defect was that the lip was allowed to fall in where it needed support under the nostrils, and the edge of the former was drawn across the teeth, giving a prominent appearance, though one tooth might not really be more prominent than another.

Mr. AMOS KIRBY (Bedford) said he could confirm what Mr. Turner had just said. The great point in procuring a natural appearance in artificial teeth, was to get a right shape to the edge. The canine teeth supplied to them bore very little resemblance to the form of the natural teeth. The occasions on which individuals showed the upper parts of the teeth were very rare, and if the rest of the tooth were made in a good form, the arch of the upper part of it following as closely as possible the natural form of the arch, a better appearance and effect would be attained than if teeth of a flatter form were used.

Mr. BALKWILL remarked that an advantage might be very often gained by putting in canine teeth a shade darker than the others.

Mr. PEARSALL in reply said, they had not asked the manufacturers to reduce their prices, and he would be very happy to go back to the old-fashioned prices of thirty years ago, provided he got the sort of teeth he wanted. He believed the makers would find no difficulty in getting reasonable prices for a good article. He admitted that some modification of the natural forms might be necessary. The purpose of teeth was a matter that should be taken into consideration as well as their design and form ; but he

was sure that if dentists came together in consultation on the subject, they might arrive at very important results and might induce the manufacturers to adopt their suggestions. Mr. Turner's remark as to the narrowing of the roots could be easily met by judicious modelling. In his opinion, the root could be easily modelled down, for the enamel surface of the teeth as at present made were twice as long as those of nature. The modelling of contours required a great deal of judgment. It should be done to suit each case, by direct observation, and not merely in accordance with rule, and a certain amount of taste should guide the worker. One thing, as to which he was sorry that no one had supported him, was the necessity for making allowance, in contours, for the pressure that was exerted on the mucous membranes. It was often forgotten that the jaw was moved by very powerful muscles, the pressure in foot-pounds being very considerable; and many men in designing a denture left sharp thin edges to the denture, with a result that might be satisfactory in the working room, but did not recommend itself to the patient. For many years it had been his practice and that of his father to make very thick edges to the dentures, and to leave hollows below the molar teeth in lowers, accommodating the patient's tongue.

The PRESIDENT called on Mr. Fisher to finish his observations in reference to the making of attention to the teeth of school children compulsory.

Mr. FISHER said that though he had used the word "compulsory," the application of compulsion was at present a matter in abeyance. All he wanted at present was that the Association should authorise the sending of books to the Presidents of the branches, with a view to the collection and tabulation of returns from all the schools, parochial, industrial, training ships, reformatory and orphan. For that purpose an expenditure of about £10 would suffice.

Mr. TURNER: The matter might well be left in the hands of the Representative Board.

On the motion of Mr. HUTCHINSON, seconded by Mr. TURNER, it was ordered that the matter should be left in the hands of the Representative Board.

Mr. G. M. P. MURRAY read a paper, "On the Workroom Section and its Contents," which will be found at page 638 of the September number.

Mr. RALPH KING made a few observations on the paper.

Mr. AMOS KIRBY read a paper "On some Properties of Amalgams" (see p. 714).

The PRESIDENT said he was sure they all congratulated Mr. Kirby on his persevering zeal in the investigation of the properties of amalgams. It would be very desirable if he gave them the results of those very numerous experiments which they would not have the energy or zeal to carry out for themselves, and perhaps at some future period Mr. Kirby would be able to give them such an amalgam as would embody all the qualities that they knew to be most desirable. There was rather an inclination to use gold stopping in preference to any amalgams; however, he did not pin his faith to gold as compared with amalgams. Everything depended on the condition of the organ dealt with, and on whether the cavity was the more suitable for the one or the other. It was best, he believed, to act on an eclectic principle and adopt whatever material appeared the most suitable to the case.

Mr. DENNANT said what chiefly struck him in connection with the paper was the importance of arriving at exact methods of using amalgams. He believed that to a great extent they had been too much used by rule of thumb. The methods which had been introduced to their notice from the opposite side of the Atlantic were likely to yield permanent results.

Mr. KIRBY remarked that the composition of the amalgam was a secondary matter. The method of using it was the principal thing. Any amalgam might be taken; but some were more liable to contract than others. Choose one of a kind the least liable to contract; mix the first portion of it in a rather moist condition; fill the major part of the cavity with it; and finish off with amalgam in a very dry condition.

Mr. LLOYD WILLIAMS said he felt very much indebted to Mr. Kirby for his experiments. Up to the time of the meeting of the Association in Glasgow last year he (Mr. Williams) had been absolutely without any confidence whatever in amalgams, and he had tried most methods of introducing them. His belief had been that no matter how they were put in they would sooner or later fail, except in some few cases where, owing to various circumstances, any sort of stopping would save the tooth. But after having had a conversation of some length with Mr. Kirby at that meeting, and learned exactly from him what his method of putting in amalgam was, he felt bound to give it a trial. He did so, and

the result was that he had since adopted Mr. Kirby's method entirely. Cases in which the use of the method had extended over a period of twelve months had proved most satisfactory ; and he now felt a certain amount of assurance that his stopping would not prove a failure as it had done before. If, therefore, members gave his method a conscientious trial he believed they would have a great many less failures than they had been in the habit of having.

Mr. KLUHT (London), asked whether he was right in understanding Mr. Kirby to say that the tendency of the amalgam put in according to his method was first to shrink and afterwards to expand ?

Mr. KIRBY said that the amount of contraction that took place was so small that it might be left out of account, and in answer to a further question, replied that he used no kind of varnish.

THE AMERICAN DENTAL ASSOCIATION.

The PRESIDENT: A communication has been put into my hands from Mr. St. George Elliott, President of the American Dental Association, inviting the members of this Association to attend the next meeting of the former, which is to be held in Paris on the 22nd of August, 1889.

Mr. A. J. WATTS read a paper "On some Work-room Appliances" (see p. 723), and after a brief discussion Mr. GEORGE CUNNINGHAM, B.A.Cantab., D.M.D., stated the principal features of an elaborate paper by him, entitled "Notes on Implantations," which will appear in the next issue of the Journal.

The President was at this point obliged to leave and the chair was taken by Mr. Turner.

Mr. CUNNINGHAM remarked that two of the best papers he knew on replantation and transplantation had been written by Dr. Stack and Dr. Baker, and were to be found in the transactions of the Royal Academy of Medicine of Ireland.

Mr. STREET asked whether, in the event of the tooth to be implanted being found not to fit the socket, it could be modified. If he remembered rightly the fangs of the bicuspid, which they that day saw implanted, were bifurcated. Could not the bifurcation be cut off, so as to shorten the tooth, and would not such an operation lessen the chance of perforation of the antrum.

Mr. CUNNINGHAM: Yes.

Mr. BALKWILL observed that a good many years ago—before the meeting of the Medical Congress in London—the question was discussed as to replantation and transplantation, and he

pointed out that absorption was of very frequent occurrence in such cases. A case came under his observation in which a tooth was placed in a bad position, in a young fellow's mouth. They tried to rotate it; it was very flat in the root, and in the process of treatment it was extracted. In order to give it a right position the root was filed before the tooth was put in again. After two years it came out, and it was found that absorption had taken place, and that it was entirely on the surface that had been filed; showing that where there was interference with the periosteum absorption took place more readily than elsewhere.

Mr. COFFIN hoped that in the interest both of patients and the profession, operations such as they had that morning seen would not be performed under such enormous disadvantages as Mr. Cunningham had laboured under in the case in which he operated.

Dr. STACK said it was not to be expected that an operation of this kind, which was in its infancy, would at the outset be performed so skilfully as it would be after operators had become more familiar with it. From the time Mr. Cunningham had taken it up, he (Dr. Stack) knew that he had devoted the greatest attention to preserving the vitality of the periosteum. To his (Dr. Stack's) mind, the most interesting feature of the question was that very matter of retaining as long as possible the vitality of the periosteum. Mr. Cunningham, as he understood, not only submitted it to chemical reagents, but was most particular about the temperature in which the scion tooth, if he might so call it, was kept. When they saw an operator take such pains as he did about each step of the operation they began to think that the statistics of an operation of the sort should be made up, not from cases in which the thing was done carelessly, but from those in which it was done with the most absolute care and punctilious regard to all the minute matters on which depended the success or failure of an operation. There were several of Mr. Cunningham's patients in whom the operation had been a complete success, and all had been accomplished that he expected from it.

Mr. ALFORD enquired whether Mr. Cunningham apprehended any evil results from hereditary taint in the constitution of the persons from whom the tooth was extracted.

Mr. BALDWIN said he had the pleasure of seeing Mr. Stack operate in three cases. He (Mr. Baldwin) examined two of them some months afterwards, and he found the implanted teeth firmer than any of the others. Some people thought that the union that

took place was due to ankylosis, but he did not think so. He believed that the tooth was held by a contraction of the cicatrical tissue. There might be a risk of perforating the antrum, but in the case of the six front teeth there was no danger of that casualty.

Mr. LLOYD WILLIAMS said he wished Mr. Cunningham had given them a little more information as to the pathological changes that took place in connexion with the union of the implanted tooth. It could be understood that in cases of replantation and transplantation, a portion of living dental periosteum would still be adherent to the cementum, and that it might become united to periosteum still existing in the socket to which it was transplanted. But with regard to what was termed implantation, where the tooth was planted into the socket of bone and not of periosteum, he would ask how the wonderful union which had been described took place. They knew that strange things happened in the body—that a portion of the metal of a bullet had been known to become encysted in such a manner that no mischief was set up—but he had never heard of any surgeon trying to make good a deficiency in the human frame by inserting a portion of metal into it in the hope that encystment or some peculiar union would take place. He (Mr. Williams) was sorry to be in discord with other speakers, but he felt rather sceptical about the operation of implantation as described. He believed it to have certain risks, which would in future quite cut it out from the region of practice. Did Mr. Cunningham consider it a vital point in the operation of implantation that the pulp should be removed? If he removed it, did he replace it by any other material; and if he allowed it to remain, did any particular pathological conditions ensue? Would the end be sealed over by any deposit of fibrine of any sort; and was there any risk of suppurative action being set up by the decomposition of tissue?

A MEMBER said a gentleman who was present at the International Congress had had two teeth implanted by Dr. Younger, of San Francisco, and one of them remained only ten days in, and these were not old dead teeth, but had been taken out of the mouths of other persons, within a historic period of two or three years. There were many cases on record in which central incisors had communicated with the antrum, and it was patent that any tooth might reach it, although the perforation generally took place only

in the case of bicuspid and molars. He believed the risks of the operation to be considerably under-estimated. They had not yet killed anybody by pyæmia ; but if they went on with the operation they might.

Mr. ROGERS was of opinion that implantation was a wonderful stride in practice, and he saw no objection to it save that it inflicted a fair amount of pain on the patient—not more, however, than was involved in various other dental operations.

Mr. CUNNINGHAM (in reply) said his paper contained full details on all the points that had been touched on in the discussion, and he might mention that if Mr. Gartrell had not given himself for the demonstration that morning, he would have been his patient for implantation. The difficulties under which he had that morning performed the operation prevented the case from being a fair test. It was an operation worthy of being tested, because the resources of the profession had been taxed in order to find out some operative manipulation that would fill up the blank that implantation filled. In America all kinds of devices had been resorted to for the purpose ; but he believed that in the cases suitable for it, no known operation answered so well as implantation. The fact that the patient he that day operated on was shortly afterwards able to eat luncheon, proved a great deal. The answers to all Mr. Lloyd Williams' questions were in his (Mr. Cunningham's) paper. He thanked the meeting for the attention with which they had heard him, and said they could all assist him by sending him teeth.

The CHAIRMAN (Mr. Turner): Gentlemen, it would be a dereliction of duty on my part and indecorous on yours, for us to break up without a few words from me. We are now at the end of our two days' work. Those who have attended the meeting will, I am sure, look back with satisfaction on the time they spent at it ; and if they have been at all attentive to the proceedings they must have acquired a considerable amount of useful information. The question we have had brought before us during the last hour would of itself have repaid a visit to this Meeting. It is a question which has various phases of surprise in it, and which comes well within the field of scientific discussion. That the operation in question will ever assume anything like practical utility is a matter which, to my mind, and I think to the minds of many others, is very doubtful. At the same time the most doubtful things sometimes surprise us by turning out far better than we anticipated, and per-

haps most satisfactorily. With these remarks, and thanking you, gentlemen, for the attention you have given to our business, and expressing a hope that we shall all meet again next year with renewed energies, and I hope with renewed curiosity to hear the results, during the intervening twelve months, of Mr. Cunningham's experiments, I have to bid you farewell. I have to thank the gentlemen of the Press for their arduous labours in supplying our proceedings to their newspapers, and I also thank the Press of the City of Dublin for the manner in which they have noticed our meetings.

Southern Counties Branch.

A MEETING of this Branch was held at the Castle Hotel, Hastings, on Saturday, September 22nd, when there were present Mr. J. Cornelius Wheeler (Southsea), in the chair, Alderman Rymer, J.P. (Vice-President), and Messrs. D. W. Amoores (St. Leonards-on-Sea), J. H. Redman (Brighton), J. H. Whatford (Eastbourne), J. E. Welch (Brighton), George Henry (Hastings), W. B. Bacon (Tunbridge Wells), President-elect, D. Caush (Brighton), W. Barton (Eastbourne), R. E. Feltham (Hove), J. E. Rymer (Maidstone), Morgan Hughes (Croydon), B. A. Williams (Croydon), F. Sheppard (Hastings), L. Maxwell (Hastings), F. Beadnell Gill (Upper Norwood), Pearce (Hastings), Dickenson (Hastings), and J. Dennant, Hon. Secretary (Brighton). After a meeting of the Council in the afternoon, the members and visitors dined together. Subsequently a meeting was held, when the President referred to the pleasure it gave him and the members of the Council to visit Hastings, and to make the acquaintance of their professional brethren there. It was by visiting the more remote parts of their district, as opportunity afforded, that the beneficial operations of the Association were felt by all its members. He trusted they might have many such pleasant and useful meetings in days to come at Hastings. The Hon. Secretary said as that was a special meeting he had no minutes to read, but he could not refrain from adding a few words to those of their President. He need not dwell on the objects and aims of that Association, which they quite understood; but he would like to refer to recent prosecutions for the purpose of saying how necessary they were, and at the same time

how distasteful they were to the members of the Representative Board. They would be heartily glad when they had done with them. Still, they were the guardians, not only of the public, but of the students and young men who were entering the profession after a long and extensive curriculum, and who looked to them as their natural protectors from irregular and unqualified practitioners. And so long as the several branches of the Association did their duty by sending up to the Representative Board true and earnest men, they might depend upon it their interests would not be lost sight of. The meeting then proceeded to the more special work of discussing several very interesting points of a technical character, introduced by Mr. Rymer, of Maidstone, and Mr. Redman, of Brighton. Presentations of objects of interest were made by Mr. Dickenson, of Hastings, Mr. Rymer, of Maidstone, and Mr. Welch, of Brighton.

Mr. Douglas Caush, of Brighton, then exhibited the following micro-photographs. The photos shown were transverse section of an upper molar with a large amount of exostosis, the roots being united by the additional growth, and showing canals passing through the cemental layer. Transverse section of lower molar, showing the two roots united by a large irregular mass of cementum, large canal in centre, and pulp cavity filled up. Transverse section of superior wisdom right, all three roots united, and covered by a large layer of cementum, with two or three canals in the layer; two of the three pulp cavities filled with secondary bone. Transverse section of superior molar, showing pulp chamber newly filled with irregular mass of bone, with no exostosis on the external surface of the roots. Transverse section of superior left first molar, showing pulp chamber partially filled with secondary bone, in structure similar to cementum, with very little exostosis on the external surface of the roots. All the photos were taken with the inch objective on Eastman's bromide paper, and whole plate size.

Mr. GEORGE HENRY, in exhibiting an abnormal tooth, said: The specimen is apparently a permanent bicuspid, which I removed on account of its extreme looseness with my thumb and finger from the left side upper jaw of a young gentleman in his eighth year. He had always been rather delicate, and had lost most of his primary molars, and this was the only permanent bicuspid thus prematurely erupted, the jaw being small to receive the full complement of—in his case—large permanent teeth.

The condition of the crown reminds one of a deciduous tooth shed in the ordinary way, and appears cupped out at the neck, as if by absorption. On removing the crown, I passed a probe around the glandular structure beneath, which proved to be connected only at its apex, and is no doubt the uncalcified root of the tooth. This was easily detached, and is preserved with the crown.

My impression is that this unusual condition of tooth development must be attributed to some injury to the dental capsule when the primary molar was extracted. It would be interesting to know the actual cause of the root remaining in an uncalcified state whilst preserving its shape. The case appears to afford a striking warning against the too early extraction of the primary molars.

Mr. Arthur Underwood says in his "Aids to Dental Surgery," premature eruption need not detain us, as it is a matter of no interest or importance. I venture to think the case before us is an interesting exception.

Mr. JAMES RYMER, of Maidstone, then read the following paper:—

MR. PRESIDENT and GENTLEMEN,—With your permission I will detain you a few moments only in relating one or two cases which have occurred recently in my practice, hoping they may give rise to a short discussion which may not alone be of use to me, but also to other members of this now important branch of the British Dental Association.

CASE 1.—A patient (male), aged 25, consulted me a few weeks ago, complaining of severe continuous neuralgia confined to the right side of the face. For some months he had been subject to continuous gnawing pain.

Examination of the mouth at first revealed nothing, the molar teeth being exceptionally perfect. One could not by means of the ordinary reagents localize the pain to any one particular tooth; as a last resource I pressed very firmly on each tooth until I reached the lower wisdom, when patient shouted "*That's the tooth*" (this caused not only pain in the jaw, but the other reflex pain); I now knew (as the tooth was to external examination perfect) that it must be either intrinsic calcification of the pulp or nodular exostosis, so I did not hesitate to immediately remove the tooth; the extraction under nitrous oxide was simple, and to my satisfaction I found on the roots several nodules of exostosed cemen-

tum, one being especially large ; to cut short the case I may say that the patient was perfectly cured from that time.

In diagnosing I lay great stress on applying firm pressure, without which certainly I could not have treated this particular case. Some may say why did I not follow out Tomes' direction? (first drill into the pulp to see if it was in a healthy condition) but if I had opened the pulp cavity, and found a calcified condition, I fail to understand how I could have brought about a cure, for pain in these cases is due to the calcareous matter pressing upon the nerves in the pulp, and it is no easy matter to remove or devitalize the pulp properly in these cases.

I admit that I have only seen two cases of intrinsic calcification, but I hope that some one present will give us his mode of treatment.

CASE 2.—Cases of Simple Chronic Periostitis.—Within the last few months I have had at least six of these unsatisfactory cases, they evidently are secondary to dyspepsia in some form or another; the periosteum coincidently with the alimentary canal becomes chronically inflamed, the teeth loosen and so cannot be properly used, tartar next forms around the teeth, and if this is not pretty speedily removed, the teeth work out, leaving unsightly gaps (cases of periostitis due to gout and to other defined causes, as I mentioned some time back, are common enough, and the proper treatment, if carried on locally and constitutionally, is generally satisfactory), but this simple chronic periostitis is most tedious to treat, and lasts until the patient is relieved of the dyspepsia, which all of us know is not cured in a day. The dentist must remove as much tartar as possible, and apply various antiseptic counter-irritants with the hope of setting up healthy local action in the gums ; but my experience is that unless the patient is treated with internal remedies to get a healthy condition of the stomach and oral cavity, a dentist's work is next to useless—he simply palliates but does not cure the disease. Before leaving periostitis I may mention that I have lately been treating a patient for both acute and chronic periostitis due to large doses of bromide of potassium, gr. xxx. twice a day. She was subject to epileptic fits ; local treatment did no good, and I suggested her medical adviser to change the bromide for the iodide of potassium ; this he willingly did, and from what I hear the change has proved beneficial.

For treating hyper-sensitive dentine I have found the following powerful escharotic very effectual : chloride of zinc and carbolic

acid crystals equal parts, with just sufficient glycerine to dissolve them ; I apply on wool a small quantity of the fluid (which causes momentary pain), I then, when the cavity admits, insert a simple dressing, and the following day I have been able to properly excavate freely putting the patient to little or no inconvenience. I do not think for a moment that the above preparation is original, but it is possible some present may not have tried it.

(To be continued.)

Central Counties Branch.

THE Annual Meeting of the above Branch will be held at the Imperial Hotel, Malvern, on Thursday, October 25th, 1888. The following will be the order of proceedings :—

11 a.m.—Council Meeting.

11.30 a.m.—President's Address. General Meeting of Members for election of Officers, &c.

12.30 p.m.—Paper—"The influence of the Nervous System on Dental Abnormalities and Lesions," by Professor Windle, M.A., M.D., Birmingham.

1 p.m.—Luncheon at the Imperial Hotel, to which Mr. Mac Adam, the President elect, invites all members and their friends.

2 p.m.—Demonstration in Plaster Impressions, by Joseph Walker, Esq., M.D. London ; Gold Filling, by W. Helyar, Esq., L.D.S., Bristol ; Exhibition of removable Crown and Bridge Work, with Models, by John H. Gartrell, Esq., Penzance ; The Attachment of Amalgam Fillings without Undercuts or Retaining Points, by Breward Neale, Esq., L.D.S., Birmingham. *Exhibits*—Improved Hospital Chair, by F. E. Huxley, Esq., M.R.C.S., Birmingham ; Dentigerous Cyst, by C. Sims, Esq., L.D.S.

3.30 p.m.—Drive to Ledbury (weather permitting), through Eastnor Castle Grounds and the Ridgeways.

5.30 p.m.—Dinner at the Feathers Hotel, Ledbury (Morning Dress) ; tickets 3s. 6d.

Trains leave Ledbury at 7.32 p.m., and 8.31 p.m., arriving in Worcester 9 p.m. and 9.20 p.m.

JOHN HUMPHREYS, *Hon. Sec.*

Midland Branch.

AN informal meeting of members and friends will be held at Darlington on Saturday, November 10th. Members desirous of introducing any topic for discussion, or exhibiting any article of interest, are invited to communicate with the secretary,

W. H. WAITE,
6, Oxford Street, Liverpool

ORIGINAL COMMUNICATIONS.**Dental Ethics.**

By THEODORE STACK, M.D.Dub., F.R.C.S.I.

As the subject of dental ethics has been selected for me by my zealous and energetic friend, the Honorary Secretary of the Irish Branch, and as I share with him the view that the definition, by the Association at large, of an ethical code is a matter now ripe for settlement, I have undertaken to introduce this subject.

I find, however, that the topics of which it must necessarily treat are many and various. Conscious that while my paper has reached an inordinate length, I have failed to do much more than enter the threshold of this subject, I would ask, on account both of the length of my paper, its incompleteness, and its want of condensation to read a semi-abstract, and to be permitted to suggest to the members present that it is advisable that any discussion which may arise on the subject, may as far as is possible be limited to the question, "Is it advisable, or is it not, that an ethical code should be established?"

If speakers take up each detail to-day, the discussion on these would be interminable.

With regard to the relation of the dentist to the public: as long as the term dentist signified an unknown quantity, it was impossible to lay down any general code of relation between him and the public.

Previous to 1859 there was, as far as dentists were concerned, general chaos. About that time Sir J. Tomes (whose absence to-day we so much deplore, while we feel confident he is with us in spirit), in conjunction with other pillars of the profession, succeeded in inducing the English College of Surgeons to establish a diploma. The chief principle laid down by Sir John Tomes,

was that the education of the dentist required a peculiar combination of mechanical and surgical training, and that this combination was not to be found in the curriculum laid down for the general surgical diploma.

The spirit of this movement culminated in the Dentists Act of 1878. This Act has done much to convert the term dentist from an unknown to a known quantity. Dentists, since the passing of this Act, are bound as far as they can and have opportunity, to assist in the training of a proper supply of dentists to meet the requirements of the public. Their attitude should now be to encourage young men to enter this profession as an honourable calling.

The dentist should recognise the duty of being particularly forbearing and tender with young children, and endeavour to train up the new generation to believe that a visit to the dentist will not entail pain. He should maintain the dignity of an educated gentleman; as far as possible be regular and punctual with his engagements, and considerate of the time of his clients. He should be courteous, firm, humane, cool, steady, temperate, and genial.

The public having passed the Act of 1878 should, in their own interest, contribute to support dental hospitals, at least in all large centres. They should treat the dentist as an educated gentleman; recognise that he has expended a large amount of capital on his education, and that his opinion and his work should receive fair and cheerful remuneration.

Medical men should be trained as students for a large part of their curriculum on the same benches with the dentist. As a result of this the seeds of mutual respect and appreciation would be sown. This would be a sure remedy for those despicable and unworthy feelings of jealousy, wounded dignity and contempt, which bring alike discredit and disgrace on those who give them expression.

The question of the fees charged to medical men should be discussed. It is immoral to do gratuitous work for the medical man in the hope that he may send the dentist patients.

The relations of dentist and doctor about anæsthetics should be temperately discussed and defined.

The line of demarcation between oral and dental surgery should be discussed; also the relations of dentists to each other; the question of advertisements; the question of consultation between brother practitioners; the question of scale of fees; the relations between the older and younger dentists.

Dentists calling on brother practitioners should not be detained. It is a piece of vulgarity and stupid affectation to keep a brother dentist waiting with the object of impressing him with the number of *your* appointments, &c.

Where two dentists arrange consultation punctuality is *incumbent* on both sides.

Dentists should embrace all reasonable opportunity of meeting one another in professional meetings and gatherings.

Gentlemen of the Irish Branch, with reference to this matter I appeal particularly to you. Would you, after having tasted the pleasure of professional intercourse, revert to the old policy of self-glorification and exclusiveness? Does not the feeling of mutual support, appreciation, and countenance, contrast favourably with that of suspicion, estrangement, coldness, or absolute hostility? Is not the better part of our nature made to bloom in the sunshine of our cordial professional intercourse, and are not the tares of back-biting, slandering, and all uncharitableness, in the fair way to be eradicated by the careful culture of our better social and professional relations? It would be utopian to expect that we should all become bosom friends, but it is not utopian to expect that these pleasant professional amenities should be the outward mark of an inward radical change in our feelings towards each other—feelings of mutual esteem and charitable regard. If our hearts are right in this matter, there will be little difficulty in arranging the details of definite ethical rules, and I may be allowed to say, Sir, in conclusion, that among the many efforts to support you in your year of office, you will favourably regard this as worthy of a place, and that this paper may possibly bear comparison to that glass rod, itself valueless, which, when introduced into the saturated solution, may cause the ripening thoughts of this Association to crystallise into the definite form of a detailed ethical code.

Anæsthesia.

BY DR. ANTHONY H. CORLEY.

MR. PRESIDENT AND GENTLEMEN,—This time last last year it was my privilege, as President of our Royal College of Surgeons, to assist in furthering the objects of your Association, and since then, with the aid of my colleagues, to add my humble efforts in endeavouring to make this meeting a success. My old friend, the indefatigable secretary of the Irish Branch, Mr. Pearsall, informed

me that I would be granted an opportunity of bringing forward a paper on a subject which he and I have discussed frequently and earnestly. The title of my paper is "Anæsthesia in Dental Surgery," but as dental surgery is only a branch of our whole science and art, it is plain that observations on anæsthesia in this department must be treated, from not only a special, but a general point of view. The special bearings are few, but important; the general lessons are both numerous and far-reaching.

My own observations, although dating back to the time at which I joined the ranks of medical students, I shall confine to the last twenty-one years, the time during which I have been connected with hospital surgery. Since anæsthesia has reached the age of over two score years, it is plain that my practical acquaintance with the subject coincides with the period extending from the termination of its minority to the present time, which may be fairly termed its maturity.

My own experience has been fairly large, both in its general and its special application, but the more I know, the more I desire to know.

As anæsthesia originated in surgical dentistry, and its use has been therein as general as in systematic surgery, I was of opinion that a discussion upon it here would elicit valuable information. I considered that the views of educated and scientific surgeon-dentists, like the members of this Association, would be of deep interest to every branch of surgery and medicine in which this greatest of God's earthly boons is necessary.

I shall dwell particularly on three aspects of the subject: first, the choice of anæsthetics; second, the methods and appliances for their use; and third, the dangers, and the precautions necessary for the avoidance of these.

In order to be brief, I shall only deal with chloroform, ether and laughing-gas. My earliest lessons and experiences were altogether confined to the first. I adopted the second when thoroughly convinced that less danger attended its use. My knowledge of the third is confined altogether to its employment in dental surgery, in which, in co-operation with my friends Messrs. Stack and Pearsall, I have had many opportunities of using and making observations upon it.

With reference to both chloroform and ether, larger experience has given more comprehensive knowledge and greater confidence. The use of anæsthetics is yearly becoming more frequent and

universal, and I venture to say the record of casualties has, notwithstanding their still alarmingly constant occurrence, a steadily decreasing ratio.

This must not be taken as even an approach to an argument for their indiscriminate use. I have already stated that experience and skill have been the result of increased knowledge, and without these the decreasing ratio could not result.

There is a certain margin of not-to-be-foreseen accidents which surround the use of all anæsthetics, but this is equally true of every surgical procedure. The ligature of a hæmorrhoid, the opening of an abscess, the extraction of a tooth—each of these has been followed by fatal consequences; but such possibilities have never more effect, when we recommend these operations or perform them, than that of making us most careful in our investigation of the general constitution and local conditions of the patients.

With reference to the immediate cause of fatal results in anæsthesia, it is necessary here to digress a little, in order that precautions and treatment may be rationally considered.

There is little reason to doubt that cardiac syncope, or sudden failure of the heart's action, is the primary cause of death by chloroform. Of course this arrest secondarily and immediately affects the brain and lungs, the two other members of what has been aptly termed the tripod of life; but the primary organ engaged is that which demands our attention as to its condition before administering the chloroform, our watchful care during the procedure, and to which stimulation should be directed should any untoward symptoms become manifest. Unfortunately, the cessation is sometimes so sudden and so complete that every effort fails, and thus the necessity for knowing its antecedent condition, and unceasing watchfulness during the anæsthesia. Some varieties of chloroform syncope, especially with weak hearts or where much hæmorrhage has occurred, are like the ordinary forms of fainting, where brain and heart re-act on each other—deficient blood-supply of the one producing defective innervation of the other. These are the cases where partial or complete inversion of the patient sets the failing organ in motion again. This necessity for almost coincident stimulation of both organs rationally accounts for the preference of modern surgeons for nitrate of amyl over electricity, a preference further supported by the want of evidence in favour of the latter. Does not this

feint and mutual interdependence of brain supply and heart's activity strongly enforce the necessity for the horizontal position during all operations performed under anæsthetics, and at the same time explain the inutility of artificial respiration.

In a most valuable paper by my friend, Dr. Thomas E. Little, published in the *Dublin Hospital Gazette* in the year 1873, a suggestion is quoted that the cervical sympathetic system might be directly stimulated to reinduce cardiac action, or the over distended right cavities of the organ might be relieved by opening the external jugular vein. I fear a dissection to accomplish the first object could not be finished till life be fled completely, and the second would, in my mind, be treating a consequence and not a primary failure.

With ether, on the other hand, the dangers seem to originate in the respiratory apparatus or in the brain, and in addition to casualties being less frequent than with chloroform, they give more marked premonitory indications of their approach. Hence the necessity for a thorough examination of the lungs, and a vigilance in observing that respiratory difficulties do not throw excessive stress on the cerebral circulation.

That such conditions of lungs and brain finally implicate the heart is perfectly obvious, and in the only ether death at which I was ever present, the heart's action ceased as quickly as if that organ were primarily affected, but a post-mortem examination revealed the first stage of pneumonia in the bases of both lungs. These considerations would suggest that the employment of artificial respiration, aided by electricity in addition to the nitrate of amyl may be useful in such cases, whilst stimulating enemata and hypodermic injections must not be lost sight of.

The immediate dangers of nitrous oxide inhalation for a brief period in competent hands are insignificant, but there can be little doubt that unduly pressed asphyxia may result. It need hardly be said here that with all three agents the immediate stoppage of their administration, and the admission of fresh atmospheric air is the first principle of meeting danger; whilst, at the same time, reflex respiratory efforts may be invoked by the flipping of face and chest with a towel wetted with cold water. In furtherance of this object the tongue should be well drawn forward to dilate the entrance to the air passages.

In dental operations as well as in all others connected with the mouth, there are additional difficulties and dangers. The fact that

the inhaler must be removed during tooth extraction adds very much to the difficulty of the procedure, and necessitates serious consideration as to the choice of the anæsthetic, which will depend, amongst other matters, upon the probable duration of the operation. Again, the chance entrance of blood or foreign bodies into the respiratory passages adds to the possibility of asphyxia. I have myself administered ether, whilst all the teeth—many of them reduced to difficult stumps—were extracted from one jaw, and I have seen as many as four teeth removed with one administration of nitrous oxide.

As to the comparative dangers of these three agents it is not easy to collect statistics, but in the article on Anæsthesia by Professor Syman, M.D., of Chicago, in "Ashhurst's Encyclopædia," published in 1884, the mortality in chloroform inhalation is variously given in round numbers as 1 to 3,000, 1 to 6,000, and 1 to 10,000. Ether is fatal in 1 case in 23,000, and the records of nitrous oxide are said to give one death in 140,000 cases.

As I mentioned before, my early surgical experience had reference only to chloroform, and although at a later period, influenced by my own observations and guided by statistics such as I have quoted, I adopted ether in preference, it is fair to repeat that in the only fatal case of anæsthesia at which I was ever present ether was the agent used. Nevertheless, with chloroform I had seen so many cases where serious alarm interrupted its use, I came to the conclusion that ether was more safe, and that the indications of approaching danger were more marked and earlier than in the case of chloroform. From these remarks administration to children must be excepted. They take the chloroform so well and the records are so free from fatalities that in their cases this anæsthetic retains its original prestige. In its administration there are two methods advocated, one its slow and gradual use, largely admixed with atmospheric air. This method is adopted by most authorities. There are some, however, especially those educated in the Edinburgh School, who press it more quickly and less diluted; believing that by this mode insensibility is produced more rapidly, and with less saturation of the patient's system by the drug.

One very distinguished surgeon of great ability and force of character, Professor Sayer of New York, has always advocated that it should be given with very little admixture of ordinary air.

In defence of the more generally received method, it must be remarked, that in a large proportion of the fatal cases death has

occurred after the inspiration of a very small quantity, varying from a few drops to a couple of drachms, and in the beginning of the process.

The varieties of apparatus for the administration of chloroform are almost innumerable. The two used most largely in this city are Skinner's, and the modification of the same known as Es-march's. I believe they are the safest, but they have the disadvantage of allowing a great deal of the vapour to be diffused through the air, sometimes to the inconvenience of the administrator and the operator.

The sensation of commencing anæsthesia by chloroform is not, as I can answer for myself, an unpleasant one. There is usually none of the laryngeal spasm or cough, or sense of suffocation which are so marked accompaniments of the first inspirations of ether. In most cases where ether is employed there are two stages of anæsthesia. After the first troubles alluded to above are over, the next few breaths frequently produce a complete but transient state of anæsthesia. For short operations, such as, for example, the extraction of a single tooth, this stage usually suffices, but where a more prolonged insensibility is necessary, the drug must be pressed, and the administration continued for a longer period. In many cases it is not possible or perhaps desirable to produce a deep sleep, insensibility to pain is all that is required, and this is often present even when the patient is struggling.

In addition to the earlier difficulties as regards ether, this last complication—that of struggling—is much more common than in chloroform. It sometimes occurs with the first few breaths, sometimes marks the transition from the primary to the secondary stage of anæsthesia. It is always unpleasant, and frequently a most troublesome accompaniment. In dental practices where it is common for only two to be present—the operator and the administrator—the treatment of this complication requires energy, courage, and experience. Pressing the anæsthesia, even at the risk of appearing to use undue force, is the most merciful means of overcoming the difficulty.

As regards sickness of stomach, I have not observed any special difference in the use of the two agents, but I believe that fasting previously is the most effectual preventive.

Whatever difference of opinion there may be as to the gradual or rapid, the diluted or concentrated method of giving chloroform,

no man of experience has any doubt that the more thorough and persistent the giving of ether is, the more satisfactory the result. Once the patient begins to inhale it the fewer free breaths of atmospheric air he gets, the better. When he cries out or struggles the inhaler, through a mistaken kindness, is sometimes removed—kindness truly mistaken, as it prolongs the struggling, exhausts the patient, delays the anaesthesia, and taxes unduly the muscular energies of the operators.

A few words of explanation in the beginning will be found of the greatest possible advantage. Tell the patient that his first impression will be that of being smothered, and that he will have the strongest inclination to put up his hands and push the apparatus from his mouth. Explain that there is no possibility of such an unpleasant occurrence, and that if he repress the inclination a few more breaths will remove the choking sensation. These initial difficulties have induced many surgeons to adopt the plan of giving a few inhalations of chloroform, of methylene bichloride, or of nitrous oxide, to dull the general and laryngeal sensibilities before beginning the use of ether.

Now, as regards the special appliances for administering it. In my mind the simpler the better. I have never found any reason to doubt the efficacy of the folded towel. It is cleanly, can be changed for each case, does not oblige the patient to inspire altogether his own exhalations, seldom fails. It may, indeed, take a little longer time and may require a drachm or two more of ether. Two methods of folding the towel we are accustomed to here. One is like making a conical paper bag with a sponge placed in it to prevent the ether from being too much diffused. As this admits excessive admixture of air, an ordinary piece of newspaper folded similarly, slipped over the towel and tied at the top, increases the efficacy, without adding to the danger. The second plan is by folding the towel smaller, like making a paper cocked-hat or boat, and as there are more layers of towel the paper covering is unnecessary. Most other apparatus have the disadvantage of uncleanness from constant use, of re-breathing of expired gases, and more or less complete deprivation of atmospheric air. The special dangers I shall allude to when I have dealt with the use of nitrous oxide.

From my experience of this agent I can state that it is a rapid, and not unpleasant method of producing anaesthesia, somewhat short in the duration of its effects, and requiring to be again ad-

ministered if more than one or two teeth at the most have to be extracted. I know that my most experienced dental friends are strong in the view that its use should not be prolonged by repetition at a single sitting, and that, consequently, it should only be employed for short operations. Contrast this with the use of chloroform and ether, under which gases I have seen patients kept for periods varying from an hour and a-half to over two hours. The after effects of nitrous oxide present no unpleasantness, there is not the sickness, nor the headache, nor the feeling of intoxication which so frequently attends the use of the other agents. The most alarming characteristic of it is the appearance of the patient. The livid face, stertorous breathing, and purple tongue, are so strongly suggestive of suffocation, that the operator must, almost of necessity, give a sigh of relief when the patient so quickly returns to consciousness.

In jotting down the preceding observations, I have endeavoured to keep as clear of mere theory as I possibly could. I have not desired to say, even if I could do so, anything new or original. I have endeavoured to bring briefly before the minds of my hearers the difficulties and dangers of every-day practice, and for this reason I have avoided even mentioning the various other drugs and means which have been suggested as anæsthetics.

In the article by Professor Lyman, from which I have quoted, I find a list of no less than nineteen agents, in addition to the three I have named. For chemists and physiologists these must have an interest, and possibly in the future for surgeons.

To sum up, then, as regards possible dangers, they may approach through heart, lungs, or brain. How are they to be anticipated? By knowing the condition of each. Hence the necessity for careful examination of thoracic organs, and the acquisition of such a knowledge of the state of the brain and its circulation as can be gained by the antecedent history and the general condition of the arterial system. Let this examination, together with the exigencies of the particular case, guide us in our choice of agents. Let this dictate the position of the patient and the symptoms to be watched for. Then, as regards treatment, omitting heroic remedies, there are nine procedures at our disposal.

1. Stopping the administration.
2. Admission of fresh air.
3. External stimulation of respiratory system—drawing forward tongue.

4. Use of nitrate of amyl.
5. Artificial respiration.
6. Inversion.
7. Electricity.
8. Hypodermic injection of ether.
9. Stimulating enemata.

I have dwelt only on the practical points which must have arisen in the experience of every gentleman here present. It will thus be competent for all who take part in the discussion to raise questions that may be answered by other speakers or to resolve doubts that may exist. The importance of the subject to dental surgeons can scarcely be over-estimated. A very limited number of the population, comparatively speaking, require the procedures of general operative surgery. On the other hand, how numerous and how increasing is the class whose troubles dental surgeons must meet. How few would suffer for any lengthened period the excruciating pain of a diseased tooth, except for the horrible though brief agony attendant on even the most skilful extraction. Having had experience of both, I would accept with gratitude anæsthesia in my own case, notwithstanding its occasional risks. To understand, foresee, and diminish these, is equally an object with our whole art and its various branches.

The Use of Imagination in the Construction and Design of Artificial Teeth.

BY W. BOOTH PEARSALL, F.R.C.S.I., M.R.I.A.

DURING the past twenty years operative dexterity as opposed to mechanical ability has made so much progress, especially in methods of restoring the forms of diseased teeth or roots, and the younger members of our profession have had the importance of mere operative skill so strongly impressed on their attention, as well as their professional ambition, that it seems as if mechanical dentistry as an art is in danger of falling into undeserved neglect. Some members of our profession are sanguine enough to believe that mechanical dentistry will become obsolete in the immediate future that now awaits operative dentistry. Be this belief right or wrong, I think all of us who carry on a mixed practice, partly operative, partly mechanical, are agreed that a large number of cases still present themselves to us for advice

how best to obtain mechanical appliances for restoring losses of teeth from disease or accident, that cannot be dealt with by the newer modes of operative procedure, that even yet can hardly be considered to have developed beyond the experimental stage, and become certainties if performed by average operators. It is with respect to the more artistic and judicious treatment of this large class of patients that I wish to invite your attention, in the hope that the mechanical training in design and construction may be directed into the safe and experienced school of the men who are passing away and have done good service in their generation. There is no limit to the avenues that are open for the employment of human skill and invention, each generation brings its own needs, which have to be supplied in various directions, and I have little doubt if we all had a constant supply of patients endowed with unlimited endurance, both physical and financial, as well as an inexhaustible belief in our inventive and manipulative powers, certain modern experiments of a quasi mechanical character could be developed *ad infinitum*, so long as we are contented to treat them as mere exhibitions of skill suitable for display in the proverbial glass case, while they possess no practical advantage over older and more certain methods of work in dealing with the dental problems I speak of. As I have said, some of our pessimistic brethren consider that excellence in mechanical dentistry has been on the wane for some years, and the credit of this baneful state of things has been credited to the unsuitable employment of vulcanite. I venture to think, however, that in the selection of the various materials modern science has placed at our disposal, a dentist can still show skill and inventive qualities of a high order, whether it be in gold or in vulcanite, or the now fashionable continuous gum work, which has hardly become more than a decoration to mechanical work as yet.

I am at a loss to understand why mechanical skill should degenerate, as I am of opinion that a well-designed and comfortable denture, fulfilling the objects of its being, does a dentist as much credit as a practitioner as an elaborate gold or porcelain contour filling that may be lost to the patient from a simple cold, setting up periodontitis in the socket, such as even the wonderful advances now seen in operative treatment may not be able successfully to subdue. From some years' observation there is, I regret to say, a far greater proportion of badly designed and inartistic work produced than might seem warranted, when we remember how

energetically the dental schools have been carried on for the past twenty years or so, and it is with a view of rousing my younger brethren to take a more hearty and personal interest in their workrooms and mechanical processes with artistic aims, that I venture to speak to you on this subject.

In constructing or designing artificial teeth, one of the safest rules the conscientious practitioner can take to heart is that embodied in the *argumentum ad hominem*—would he like to wear it himself? And I am thoroughly convinced that many professional pitfalls are brought about by the too frequent habit of studying the plaster model rather than the patient. Attention is more frequently directed to the solution of the mechanical problem on the model rather than to the book of nature. I would therefore earnestly urge the cultivation of a habit of endeavouring to picture or imagine in your mind the nature of the appliance you purpose to supply to your patient with all the details so distinct and real that you could make a drawing from them or model them if you wished before you even placed the impression tray in the patient's mouth; and it is the use of this precious gift of imagination that enables the users of it to shine in poetry, painting, literature, and all the inventive arts and sciences. I dare say some of my hearers may ask how can you advantageously use imagination in the construction of so prosaic a work as a denture to supply missing teeth?

In the first place, as you examine the patient you should be able to picture in your mind the original condition of the mouth; you ought to be able to determine how far the muscular action of the cheeks and mouth will affect the stability of your work; you ought to be able to determine the amount of pressure the patient can bear in mastication, and possibly be able by judicious observation to avoid the pressure spots so frequently produced by ill-designed work on moveable surfaces in the mouth. You should be able to determine when it would be best to thicken or reduce the bulk of the work, so that in cases of great disfigurement from loss of support caused by absorption of the alveolus, you can determine how best to restore the natural action and expression of the mouth, not only by study of the profile but also of the parts as seen in elevation. Here is a field in which to show you are both a dentist and an artist. You neither distort nor disfigure whatever expression your patient possesses. You can repair the ravages which disease and decay have made in the most mobile

and expressive features of the face, and not only restore the functions of speech and mastication, but also that of natural and artistic expression.

The points I would dwell upon as likely to lead to an artistic result in the construction of artificial teeth is a careful study of the natural expression of the mouth, by making experiments with suitably moulded wax try plates ; the careful selection of suitable teeth, in harmony in form and colour with the face and mouth of the patient, and the correct centering of the teeth when set up or mounted, not by rule but by direct observation ; not altogether according to taste, as the cookery books say, adopting a bold style or the reverse, but rather by the careful noticing of the characteristics of each case with which you have to deal. The careful and deliberate trying in of the work during the different stages of its progress often affords most valuable hints, not only from the point of view of your own experience but that of your patient ; and I confess to enjoying the criticism at this part of my work, of an intelligent patient, correcting the deficiencies of the model or preserving its excellencies. Last, but not least, is the painstaking adjustment of the denture in the patient's mouth after it has been continuously worn for twenty-four hours, carefully noting the friction spots on the mucous membrane as well as on the plate, and paring or dressing away those on the teeth with a scholarly perception of their relative importance, as well as careful fine fitting of the articulation after the patient has had at least forty-eight hours' experience in the use of your appliance.

How does it happen that some practitioners, the sittings necessary for the construction of a denture over, are seldom required after its completion to see their patients more than two or three times, and then only for some trifling adjustment of the bite or some friction spot on the gum ; while other practitioners who are just as skilful as *workmen*, keep their patients in prolonged and unnecessary discomfort for days or weeks after the case is finished ? In the first place, the battle of difficulty has been fought and won by the dentist before his work was worn by the patient ; in the second case, careless or inaccurate models may be the cause, or the design of the case has been left to an assistant who has almost certainly never seen the mouth, the lamentable result often brought about by the neglect to make proper observations at sittings given by the patient for the purpose for trying in. If it takes a master of his art, like Sir John Millais, from

sixty to seventy sittings to produce a protrait, do you not think the average dentist ought to neglect to give the same deliberate care to his work? Want of power to design, in other words, the power to imagine how a case ought to look when finished, is in my opinion one of the greatest defects a dentist can be afflicted with. How often do we see cases in which the workmanship and finish are worthy of all praise as well as a place in a museum, but lack the life-giving quality of design, looking a model of skill anywhere but where it is intended to be seen—in the patient's mouth. An extreme observance of mechanical symmetry in the position of the teeth, is a frequent characteristic of the work of many practitioners, and I do not think I am unduly ironical, when I confess that I am irresistibly reminded of the keyboard of a piano or the dentations in the string course of a classic building. Now we ought to remember that nature abhors mechanical symmetry, and the keyboard style of denture, no matter how beautifully it may be constructed or finished, can never be called artistic or prosthetic as naturalness of appearance is altogether ignored, and the patient's expression, when we observe it in repose or in animation, shews that a startling and inappropriate experiment in decoration has been carried out in the restoration of the lost organs.

I think I have sufficiently dwelt on the use of imagination in our important work; and what am I to say about that of the manufacturers who supply us with the artificial teeth we have to use in effecting restorations from injury or disease. We all admit that wonderful advances have been made since our President first began his half century of dental work, in the quality of the teeth now supplied both in colour and translucency. Have the manufacturers progressed in the direction of design and fitness of form as much as we have a right to expect from the close study that has been given to the forms of natural teeth during the past twenty years? Is the manufacture as perfect as we are so emphatically assured by these gentlemen? I say no. I have only to draw your attention to certain features in the manufacture to explode this untenable position. That there are serious defects and mannerisms in the moulds still used by our manufacturers no one can deny. Types of teeth (wonderful for the standard required forty years ago) are still manufactured in large quantities, with the further defect that the modern descendants do not possess the sterling qualities of naturalness of shading and in-

destructibility of the earlier teeth, the modern tubes for instance being much more easily ground and broken than was the case thirty years ago, nor are the same pains taken in the shading of the enamel surfaces of the incisor teeth of this make now-a-days.

Another serious defect is the want of rhomboidal form in molars as well as the smallness of size, making it difficult for us to go as far as we might imitating the natural method of articulation, for even in the elaborate upper and lower sets, including the molars and bicuspid, will not make any approach towards natural articulation, no matter how carefully they are set up. Then we come to the exaggerated rounding of the approximal surfaces of the artificial teeth, particularly the incisors and bicuspid, so that valuable time has to be spent in grinding away material that could be saved from waste by the manufacturer, if only the moulds were more naturally modelled. I need not dwell upon the exaggerated tables of the enamel surfaces of the upper and lower incisor teeth bearing little or no resemblance to the natural teeth; this is a defect I am astonished has not been remedied, although I am sure manufacturers have often been reminded of it, as well as the ridiculous habit of providing for elderly people the cutting edges of the teeth as seen in youth, while the long surfaces of the exposed roots are invariably omitted, or so badly modelled and coloured as to be laughable, as a practical attempt to reproduce nature. Latterly a baneful vice has sprung up in the manufacture of teeth, of creasing the enamel of the incisor teeth with grooves of mechanical regularity across the tooth, or in the direction of its length; so symmetrical is this creasing as to give an unmistakeable artificial look. With this defect in view, I beg of you to look at the bone work in the museum, for even in examples where the work has been mechanically executed, the teeth being of different curves and shapes on their surfaces, hardly two of them alike, they, of course, look far more natural than our artificial teeth artistically mounted. I have been told by manufacturers that the profession will only buy certain goods and certain sizes. To this I answer, that there are numbers of artistic dentists who *will* pay for better goods, if only the manufacturers will place them in our hands.

In saddle back and other vulcanite teeth, the breaking strains of the teeth are not considered in their design as they ought to be, and very little observation and experiment would remedy this defect.

It has often been a matter of surprise to me that metal teeth have

not been made for use as molars in edentulous lowers. They would help to ballast the case in a very convenient way, and would, I think, make less noise in use than the porcelain teeth. My friend Mr. Kirby, of Bedford, makes metal blocks for such purposes, that are admirably designed for ballasting and noise saving. Why cannot the manufacturers turn them out for us ready made, as the trouble would be trifling for a large number, as they could be punched or stamped in presses by cheap labour?

I would urge the use of visiting picture exhibitions and carefully studying the various phases of expression in painting and sculpture, as we see it developed by the minds and hands of our great artists. It is invaluable to us all as a stimulus in our art.

In conclusion, I have to thank you, gentlemen, for your patience and attention, and I hope in the discussion you will support my contention, that artistic mechanical dentistry is well worthy serious attention.

Some Properties of Amalgams.

By AMOS KIRBY.

WE are accustomed to think that the successful treatment of dental caries depends largely upon the exclusion of foreign matter from the cavity which results from the action of decay and from the removal of diseased tissue.

The perfect exclusion of moisture may not be essentially necessary, but it is a matter of common observation and consent, that the more perfectly the cavity is occupied by stopping material, the greater under similar conditions will be the prospect of success.

We are acquainted with very few substances which lend themselves to our purposes in a perfectly satisfactory manner, and amongst those that we are glad to employ, it is a matter of regret that amalgams with their many valuable properties are all of them subject to more or less serious defects. These defects can be lessened or overcome by methods which are now frequently used, but as the causes which lead to failure or success are not yet fully understood or recognised, it is evident that any facts which have a bearing upon the subject cannot be devoid of interest. I have therefore ventured to lay before this Association the results of some experiments which I have carried on at intervals for many years, down to the present time.

Some of them have been already mentioned, but as they have never been published in detail, I will (for the sake of clearness) take the liberty to describe as briefly as possible those which appear to have an important bearing upon our daily practice.

The first object was to discover whether dental amalgams were the subjects of expansion or contraction during the process of hardening, and it was found, that although both these actions took place under different circumstances, there was no difficulty in procuring amalgams in which they were not present to an injurious extent. It was however evident that changes of another kind occurred, which were so important in extent, as to offer a reasonable explanation of the want of success which sometimes attends the use of these substances.

The changes which occur *out* of the mouth, appear to be identical with those which have frequently been described as "a tendency to form a cup-shaped surface *in* the mouth, and to turn away from the edges of an orifice."

Certain indications led to the conclusion that these changes were due to the fact, that if an amalgam is carefully packed and stippled into a cavity, some mercury is squeezed out of the first portions introduced, so that when the filling is completed, there is an excess of that substance in the part last introduced. There is evidence that this action takes place in amalgams containing a very small quantity of mercury, even when, in consequence of the dryness of the mass, it is not visible to the eye.

I think there is great probability that during and after the process of setting, some of the mercury leaves the part where it was in excess, and is taken up by the dryer part from which it had been squeezed out, and that this action goes on until the mercury has become equally distributed throughout the mass the result being, that the part which loses mercury undergoes a diminution in bulk, whilst the part to which it travels, increases in an equal degree.

No change in form appears to take place when mercury is present in equal proportions throughout, as for instance, in cases where the excess at the surface has been thoroughly taken up by a sufficient quantity of dry and powdery amalgam being placed upon it. Or, as in some of the older stoppings, and those made by amateurs, where the whole of the amalgam has been introduced in a mass and simply pressed into place without manipulation. Many of the older practitioners have seen imperfectly made

filings of this kind, which have outlived more carefully made stoppings, and I have always considered this to be the explanation of the anomaly.

Before proceeding to describe any experiments, it may be as well to allude to the difference which is found between newly prepared metals, and those which have stood for some time before being used, whether in the form of *præcipitate* or in filings. The metals in what may be called a nascent condition, require a very much larger quantity of mercury to form a paste, and they harden with very much greater rapidity, so that experiments made with them do not represent the conditions under which we use our stoppings. Palladium *præcipitate*, as well as requiring a smaller quantity of mercury after it has been kept a time, refuses to form an amalgam at all after it has been kept longer, but recovers the power after the application of a gentle heat; a higher temperature, however, again interferes with its amalgamation.

Two methods were first used in making investigations; one being the well-known specific gravity test originated by Mr. C. Tomes. The other consisted in introducing small pellets into the bulb part of an apparatus like a thermometer, the unoccupied space in which was filled with water; the whole was kept at the temperature of the body, and the expansion or contraction was indicated by the level of the water in the tube. These methods were soon discontinued in favour of others, one of which consisted in placing amalgam in a metal trough with a moveable end in contact with which was arranged a screw micrometer. As soon as the trough was filled, the screw was turned back until the substance had set, when by again turning the screw forward, the most minute change in size would be indicated. Other indications were sought for, by filling small pieces of glass tube which were closed at one end; it was thought that a magnifying glass would show if any change took place, especially at the orifice, and the plan proved very useful. A small size was used, because it would be similar to many dental cavities which we are called upon to treat. It was afterwards found that this was important, because in tubes of a larger size, different methods may be used, by which a closely fitting, but misleading, stopping can be made. Into one of the tubes an amalgam was introduced, prepared from pure silver. The following morning it was found to project from the orifice so much, that some mistake appeared probable; the projecting portion was ground off to the level of the glass, and it was again

observed on the succeeding day, when the same amount of projection was noticed as before. Other tubes filled with amalgams of filed and also of præcipitated silver gave similar results. Some of the tubes were cracked by the expansive force and others were split in two, but several remained entire, so that the solid amalgam had not only expanded long after it had become perfectly hard, but it had also flowed out at the opening of the tube. I should have considered this action impossible, had I not recently seen a description of a similar thing taking place with a mass of solid cold iron exposed to heavy pressure.

Some charges of silver amalgam were also placed in the measuring trough, and all of them gave evidence of very great expansion, reaching, as nearly as I can remember (for I cannot find the record), to something like 1-50th of their diameter. Its expansive power ought to make this metal valuable as a stopping. Sir John Tomes says that filings of silver coin were commonly used as a stopping at a comparatively recent period, and I have seen an upper canine which had been preserved for many years by an amalgam of this kind, made by its owner, who was in India and far away from any dental assistance.

Unfortunately, silver does not stand the wear of mastication, and has the very bad property of giving up a portion of its mercury to any other metal with which it comes in contact. Palladium amalgam was measured, and shewed very considerable expansion, in one instance to the extent of about 1 in 25 of its diameter. This property is more remarkable from the very small amount of solid matter which the amalgam contains; it can scarcely be used with less than three times as much mercury, and works fairly with six times as much as there is of palladium; copper amalgams contracted slightly, although they are all notable as good stoppings in suitable situations.

From their very general use alloys of silver and tin possess the greatest interest to us. Those which contain the largest proportion of silver were found to expand more than those with less, but not by any means in proportion to the increased quantity of that metal. If too much silver is used, there is the same tendency to give up mercury which has been noticed with pure silver, and which also is a property of copper amalgam.

The addition of gold in small quantity, say from 4 to 10 or 12 per cent., increases the expansive tendency, and causes an amalgam to set more rapidly, but if added in larger quantity, makes

the stopping too soft, and causes it to part with mercury very readily. An addition of 3 per cent. of platina has the same effect as gold in many respects, but does not, as has been supposed, alter the tendency to change in form.

An amalgam containing five-and-a-half parts of silver and six of tin contracted in different instances from 1 in 2,000 to 1 in 500.

Another mixture of eight parts of silver and three parts of tin which was put into the trough on the 10th June, 1872, at 10 o'clock, p.m., expanded 1 part in 2,000 before 11 o'clock, and on the 20th the expansion had increased to 1 in 200. The filings used were freshly made, and took a large quantity of mercury to form a workable amalgam, and set almost too soon to be used.

An amalgam with five-and-a-half silver and three tin was tried on 4th May, at 10 p.m.; in half-an-hour it had contracted slightly, and in an hour the contraction was about 1 in 1,500. At 11.20, there was a further increase. The next evening at 6 o'clock, a slight *expansion* was noticed; this had increased at 10.30 to 1 in 2,500; on 13th (two days) the expansion had still greatly increased and read 1 in 600; the action continued slightly until the 15th (four days), after which time it was not recorded. On examination at the end of three years, the indication was 1 in 400.

As an example of the action of a similar mixture, with the addition of about 17 per cent. of gold, an amalgam was introduced into the apparatus on 12th May, at 7.30 p.m.; it was hard in 10 minutes, and had contracted about 1 in 1,200, in another 20 minutes the contraction was somewhat less; in an hour, some expansion had taken place, which had increased in two hours to 1 in 800, in another hour it had doubled, being 1 in 400, in seventeen hours it was about 1 in 250, and in twenty-four hours 1 in 200. There was no further alteration in two years, but in three years the general form of the mass had slightly changed. It will be noticed that this specimen contained too much, both of silver and of gold, for general use, and it is one of the very few which showed change of shape, so very long after it had become perfectly hard.

The amalgam which I have usually employed (although it is possibly not the best which can be prepared) contains four parts silver, three parts tin, and about seven per cent. of gold, to which an addition has sometimes been made, with questionable (or at all events uncertain) advantage, of about one per cent. of zinc. A charge of this (without the zinc) was tried, following the last named on 14th May; it first contracted to the extent of about 1 in

1,000, after which it expanded gradually, until at the end of fourteen days it reached 1 in 300; it was not again examined for record until after three years, when it appeared to be rather larger, and, like the last, had become slightly changed in form. These were rather newly prepared filings.

Another mass of amalgam from the same alloy mixed under different conditions shewed much less expansion; another specimen prepared from filings which had also been longer cut up, was tried in 1874, and showed a contraction of 1 in 1,000 at the end of three days. This change is, of course, quite immaterial, and the bar retains its size and form perfectly at the present time.

In addition to the above named and many other home-made alloys, various Dépôt stoppings were also tested, and although they all shewed a tendency to slight expansion or contraction, they did not vary greatly from those of my own filing which had been prepared for an equal length of time.

A mass of one of these tested in December, 1881, contracted slightly, and then settled down at an expansion of about 1 in 3,000.

Another used in a rather soft condition remains still at an expansion of just about the same amount.

One specimen of amalgam, which was said to have a tendency to expand, shewed in my hands a very unusual degree of contraction, amounting in one case to as much as 1 in 300; (one of my own had contracted about as much).

The last of these which I shall name is an old stopping that has done some very useful work, but in spite of this, a mass of it put into a parallel-sided glass tube, dropped out after it had become hard, and another piece put into the micrometer shewed a contraction of about 1 in 600.

I am afraid that the only thing to be inferred from the notes of these experiments is, that the expansion and contraction of amalgams is a very uncertain quantity; but as has been said, the attempts to measure revealed other unexpected but not unimportant facts. Amongst the earliest subjects placed in the trough, was a first home-made alloy of silver and tin in equivalent proportions; these had been melted together without much care being taken over the process; the amalgam when hard, retained its form for a short time but soon *appeared* to have expanded, the following morning the whole surface was found to be studded with small tubercles, which became more conspicuous in the course of one or two days, making themselves seen even on parts which had

been scraped free from them' after their first appearance. A little consideration suggested that these appearances were due to small particles of undissolved silver, which expanded more than the surrounding substance, but it also suggested that important changes could take place amongst the particles of a solid mass of stopping, long after it had become hard, and that probably some mercury had left the tin portion which it had first joined, and had afterwards become attached to the silver.

After re-melting the alloy, nothing further occurred of the same nature.

In the next experiment, the amalgam was put into the trough in successive layers, the lower portion being carefully stippled in with a very small round-ended burnisher, and each successive portion treated in the same way. When finished, the upper part was rather moist from the excess of mercury which had been squeezed out in the process of packing. This was removed to moderate dryness but without any especial, or rather, unusual care; when set, its length was measured, and it was laid aside till the following day for further measurement. In the morning, however, this could not be accomplished, as it did not fit the trough at all, both the ends having turned up to a notable degree; at the end of another day the change was still more marked, and finally, it presented the appearance of a boat rather than the original form of a straight triangular bar. Of course the experiment was repeated more than once, but the results were always similar.

It was thought that the change of form might be caused by the upper surface of the bar having contained more mercury than the lower, and that this excess had gradually been transferred to the dryer part. If such an action had taken place, the upper part would probably have contracted and become shorter, whilst the lower side would have become longer, and hence the bending. Acting upon this idea, the trough was again filled with a rather moist amalgam, and the excess of mercury on the surface was well scraped away. A quantity of very dry amalgam, containing three or four times as much filings as mercury had been prepared, and was packed on in place of the moist part which had been removed, so as to equalise the distribution of the metals. After the bar had become hard, it was examined repeatedly, but it never showed the smallest indication of tendency to turn up at the ends, and it retained its form as long as it was under observation. Many bars made in this way for measuring are still preserved, and show no

change in form at the end of from four to twelve years, which is a sufficient time for all practical purposes.

Very few experiments were made with amalgams in a dry and powdery condition throughout, as those which were made showed a marked tendency to contraction, after which they changed in form so greatly that they could not be measured, whilst the test pieces, which were made of a moist bulk and well dried upon the surface, acted more satisfactorily than any of the others.

The exceptions to the bending tendency in some bars composed of a single metal, were very striking. One bar of palladium amalgam, after changing shape very considerably, returned gradually to its first form, and one or two pieces of Sullivan acted in the same manner. The only explanation which occurs to me is, that these substances being in a very fine state of division, each atom takes up as much mercury as it requires at once, whilst the larger grains of the filings which are used in alloyed metals only take up mercury on the surface, and afterwards appropriate any surplus that is within reach.

Many experiments were made with glass tubes. In some of these, amalgam introduced in a mass without packing became loose in every part after a few days. In others, the amalgam was introduced in small pieces, each of which was packed in carefully and well stippled down towards the bottom; the top, though left moderately dry, was not carefully loaded with dry mixture. At first, all the stoppings appeared to fit well and the tubes had a mirror-like surface all over; after a few days the lower part remained moderately bright, but the upper half became dull in all of them. When in this condition, a number of them were put into a small cup containing blue dye and attached to an exhausting syringe, by means of which the air contained in any spaces that existed was very much rarified; consequently, when the air was re-admitted, the dye was forced into every unoccupied space, including the minute capillary tubes in the substance of the glass itself. The upper part which was previously dull looking became deeply stained with dye, but the lower part remained bright, showing that the material in this part had undergone very marked expansion, at the same time that the other end showed the opposite action.

In the experiments which have been mentioned, there is no *proof* of the transfer of mercury from one part of a mass of amalgam to another, although the results seemed to indicate the

probability of such an action. More recently, however, another method was adopted, with a view to procure further evidence.

Two pieces of hard wood held together by a screw clamp, had a hole bored between them, so that each of them formed one side of a cylindrical space of $\frac{3}{4}$ of an inch in length, by $\frac{1}{8}$ diameter. A charge of amalgam was prepared with rather more filings than mercury, and introduced into the cavity in small pieces, each of which was carefully stippled down towards the bottom; when finished there was a great excess of mercury at the surface, but the whole became moderately hard. As soon as this had taken place, it was turned out by taking off the clamp and separating the sides; the piece was cut in two at about an equal distance from the two ends, and the two parts made to weigh exactly the same, by taking some from the cut part of one and adding to the other. The weights were carefully noted down. Another cylinder of amalgam was made in exactly the same way, but instead of being divided at once, it was allowed to stand for seventeen days, when it was also cut into two ends of equal weight. All the pieces were then exposed to a heat sufficient to drive off the mercury, after which each portion was weighed again, to ascertain what proportion of mercury it had contained. The following were the results :

WEIGHTS OF FIRST BAR OR CYLINDER.

Upper end... ..	27 grs.	Lower end	27 grs.
After heating	12 $\frac{3}{4}$ "	After heating	15 $\frac{1}{4}$ "
Loss (mercury)	14 $\frac{1}{4}$ "	Loss (mercury)	11 $\frac{1}{4}$ "

Excess of mercury in the upper, over and above the lower end, 2 $\frac{1}{2}$ grs.

WEIGHTS OF SECOND CYLINDER.

Upper end	27 $\frac{1}{2}$ grs.	Lower end	27 $\frac{1}{2}$ grs.
After heating	15 "	After heating	15 $\frac{1}{4}$ "
Loss (mercury)	12 $\frac{1}{2}$ "	Loss (mercury)	12 $\frac{1}{4}$ "

Excess of mercury remaining in the upper end $\frac{1}{4}$ gr. only. ($\frac{1}{4}$ of first piece.)

It is, of course, impossible to prove that the upper end of each of these tubes contained, after they were packed, exactly the same excess of mercury, but several masses gave similar results. It appears, therefore, that there is an approach to positive proof that after the stopping mass had become hard, a quantity of mercury, weighing something like 2 grs., was transferred from its upper to its lower end. There was, however, an excess of $\frac{1}{4}$ gr.

still remaining at the moist end, but it would probably have followed the other if more time had been allowed. Of course no such excess of mercury would be allowed in practice to remain on the surface of a stopping. The large amount was left there in order to make the experiment more striking.

One cylinder made in the way just described was left for two days only before being divided, and then appeared to have an excess of about 1 grain of mercury in the upper end; thus suggesting a partial transfer of that metal.

One other experiment was interesting, although it proved nothing but absence of transfer. A hole was nearly filled with moist amalgam and the excess of mercury was scraped away. The upper end was then filled up with dry amalgam, containing only one-fourth its weight of mercury. When divided and treated as in the other cases, it was found to contain exactly the same quantity of mercury in each of the two ends. Of course this *very* equal proportion was, to some extent, a matter of accident, but the attempt to obtain such a condition is probably our best road to success in employing this highly useful class of stopping materials.

On some Work-room Appliances.

By A. J. WATTS, L.D.S.I.

WORK-ROOM appliances ought, I think, to receive more attention from dentists than they have hitherto done; the various depôts and manufacturers do their best to supply our wants, but it is hardly possible that they should know exactly what kind of tool will best suit a dentist for use in work-room or surgery.

There is no doubt that instruments used for operations are far better designed for the work they have to do than are the tools usually sold for the workroom, for the simple reason that these instruments are designed by our best operators.

For some time past Mr. Pearsall and myself have endeavoured to reform and invent several tools or appliances that have proved to be very useful, and I will venture to say, a decided improvement on the tools usually sold for the same purpose.

I will first mention the work-room bench designed by Mr. Pearsall; the principal features are: first, that it is much higher

than ordinary dental benches, the height being forty-one inches; secondly, the absence of legs or standards, the support being from strong iron brackets bolted to the wall; thirdly, the simple and efficient device for holding bench tools. The increased height, I feel certain, is a great improvement, for work can be done either sitting or standing, and it offers a very convenient support for grinding or polishing headstocks at the same time. The absence of standards or legs is also a desideratum, as the floor is left comparatively clear, and a tooth dropped can be readily found. The device for holding the tools is simply a thin shelf fixed about two and a-half inches from under surface of bench and corresponds in outline with bench, whether it is straight or curved; it is then divided into partitions to take the various tools; the advantage we claim is the readiness with which any tool can be found and yet remain out of the way during work; I consider it better than keeping them in a drawer. The casting trough, exhibited in the work-room section, was designed in 1853 by the late Mr. Pearsall, and answers its purposes admirably; it is 36 inches long by 18 broad by 11 inches deep, the sides stand outward, the end pieces are upright, it is supported on four legs, and there is a tray under trough for holding casting rings or boxes.

The casting sand we use is the best I have seen, as it does not contain clay. It is much more easily worked than the sand usually sold for the purpose; it is to be had in Belfast. Mr. Pearsall's leaden stand for catching the water from corundum wheels is a decided improvement on the tinned iron ones; it acts well as a rest for the hands, and the disadvantage of having a pool of water is entirely dispensed with, hence a tooth dropped can be immediately picked up. The provision for carrying off the water is by a tube fixed about a quarter of an inch from the bottom, thus allowing the gold deposit to subside. A glance at the one exhibited will give a far better explanation of it than any attempt on my part.

The steel punches I have here were made by Mr. Pearsall. I have found them superior to any others for chasing gold plates.

The swaging hammer designed by the late Mr. Pearsall was made in 1857, and is somewhat like a gold-beater's hammer. Its special features are the broad hammer face that strikes the cast and gives a very equal blow when used, rarely causing a cast to widen out or split; the eye is placed one-third of the hammer head's length from the pane, thus leaving fully two-thirds of the

weight below the eye. The shaft is seven and a-half inches long and slightly curves downwards, the weight of hammer head is eight pounds. I can strongly recommend this pattern.

The seats we use have been designed by Mr. Pearsall and myself, they have the advantage of being instantly raised or lowered, and the seat is made to revolve, thus accommodating all the little movements of the body, and reducing the wear and tear on clothes; it is also well suited as an operating stool.

I wish now to draw your attention to a complete vulcanizing apparatus, comprised of flasks, cramps and vulcanizer, made especially to meet all the requirements that a dental mechanic may want. In the first instance, the flasks are designed to take either method of flasking, as shown by the patterns I have here; you will notice that there are but two distinct parts, and that the guides are inclined planes, which greatly helps opening or closing, especially if there are any undercuts; these flasks are made in gun metal and are considerably thickened where the strain comes. I have some here that have been in constant hard use for the past three or four years, and are just as good as the day I made them; they were cast by the aid of Mr. Fletcher's injector furnace, in Mr. Pearsall's workroom, and they are made in two sizes.

The cramps are also made of gun metal, the upper angles of which are webbed, giving great strength where it is needed. The screw has a loose piece attached to it that revolves, or remains stationary while screw revolves; the object of this is to disperse the pressure, and thus preserve the upper part of flask from the damage that always results from using a plain set screw; these cramps are made in three sizes, to take one, two, or three large or small flasks respectively. The vulcanizer has been made expressly to do away with the leaden or composition jointing; as I need hardly tell you, if there is an escape of steam, by the wearing out of the packing, the valuable steam gauge invented by Mr. Gartrell becomes useless as soon as the vulcanizer becomes dry; now to meet this evil I have adopted the ground and bevelled joint which only requires to be kept clean and slightly greased, and will work well for an indefinite period as it never requires re-grinding, so that you may always rely on it as a permanent joint. Another valuable point is the absence of steel pins with which the cramp is usually fixed; I have, you will see, made the cramp to fit into two slots one on each side of vulcanizer; these slots are

made very strong and will resist an enormous pressure. The body of vulcanizer carries besides these slots the safety valve and the blow-off-cock all in one casting, which reduces the cost considerably. The cover and body of the vulcanizer are made in gun metal, the cramp is the best forged iron, and the screw steel. Vulcanizers, flasks and cramps are made by my brother, M. H. Watts, engineer, Macclesfield. The vulcanizer is made in three sizes, the smallest is 4½in. inside diameter by 3½in. deep, the second size is 4½in. inside diameter by 6½in. deep, and the largest is 4½in. inside diameter by 8½in. deep; these measurements apply to the body of vulcanizer and do not include the dome-shaped cover. All these vulcanizers are fitted with Mr. Gartrell's gas regulating steam gauge, and with Mr. Fletcher's solid flame burner made specially for vulcanizers; they are sent out after being tested up to 300lbs. pressure.

REPORTS OF SOCIETIES AND OTHER MEETINGS.

Birmingham Dental Students' Society.

THE Annual Meeting of the above Society was held at 71, Newhall Street, on Thursday, September 27th; Mr. Frank H. Goffe, L.D.S., in the chair.

The minutes of the previous meeting having been signed, Mr. P. T. Naden (Hon. Sec. for past year) read the Annual Report, which stated that the attendance at the meetings had been satisfactory, though the Society had not largely increased in numbers, owing to the small number of new students.

During the year the following papers have been read:— On *November 23rd*, 1887, a paper was read by Mr. Naden entitled "Dental Caries, Its Causes and Pathology." This was followed by a brisk discussion. *January 24th*, 1888, Mr. Charles Sims gave a very interesting account of "Ancient Dentistry," exhibiting at the same time a large number of specimens. *February 23rd*, Mr. E. C. Simsgavea paper named "A Brief Description of the Permanent Teeth;" and Mr. Naden showed some models of various cases of cleft palate. *March 29th*, 1888, two papers were read; one by Mr. W. J. Royal on "The Salivary Glands, and their Secretions." The second, by Mr. W. Palethorpe, L.D.S., on "Alveolar Abscess," with many carefully executed illustrations, demonstrating its various stages.

At the close of this meeting a "social evening" took place, at which many friends of members were present, and the proceedings were unanimously voted a great success.

Mr. Naden having read the report, the treasurer brought forward the balance sheet, showing very favourable results from a financial point of view.

The following officers for the session 1888-89 were then elected : President, Breward Neale, Esq. ; Vice-President, Frank E. Huxley, Esq. ; Treasurer, Mr. W. J. Royal ; Members of Committee, Messrs. P. Naden, G. Foster, and E. C. Sims ; Secretary, Mr. J. Ernest Parrott.

A vote of thanks to Mr. Goffe and to the retiring officers terminated the proceedings.

MINOR NOTICES AND CRITICAL ABSTRACTS.

Is Chloroform a Safe Anæsthetic for Children ?

ONE of the many points of interest connected with the medico-legal aspects of anæsthetics was introduced at a recent inquest, held by Mr. A. Braxton Hicks, upon the body of an infant who died under chloroform at one of our large hospitals. The child, aged five months, was operated upon for the removal of a nævus, and died from the effects of the chloroform after the operation had been completed. The report states that the "coroner elicited that children very rarely die under chloroform ; they take it readily, and easily recover." Children, it is true, take this anæsthetic fairly well, but it is hardly consonant with our present state of knowledge to allege that fatalities among infants and children under fifteen are less frequent than among adults, always providing the individual in either category is not the subject of disease. The ill-fed and poorly-nourished children who come to our hospitals are not favourable subjects for chloroform administration, and the belief, which we fear is only too prevalent, that the young rarely die under its influence is likely to aid in increasing the number of victims who are yearly sacrificed to chloroform. It is highly probable that, when healthy members of the community are compared, no decennial period of life can be selected as being less obnoxious to chloroform than any other. Snow's tables, although faulty in some points, show, and we believe truly,

that the maximum of deaths occur from chloroform between the ages of fifteen and forty-five; but such deaths are not to be attributed simply to an age liability, but to many intercurrent circumstances conditioning life during that busiest period of existence. When children are too small to render the exhibition of nitrous oxide gas and ether advisable, it is wiser to employ chloroform diluted with ether, as in the A.C.E. or one of the many kindred mixtures.—*Lancet*.

Transplantation of Human Bone in a Case of Ununited Fracture.

A RECENT number of the *British Medical Journal* gives the following curious case :—"M. A. Poncet, of Lyons, read a paper before the Académie des Sciences, on a case in which he had transplanted a piece of bone for ununited fracture of the tibia. The patient, aged nineteen, had sustained a compound fracture of the tibia about the middle of the shaft thirteen months previously; this had been followed by necrosis. On January 19th half of the first phalanx of the big toe, measuring about one inch in length and half an inch in width (the articular ends having been removed), from the recently amputated limb of a healthy man aged forty-three, was inserted between the fragments, after having been soaked in sublimate solution for three minutes. Antiseptic precautions were taken and the graft did well, but at the end of two months the tibia was still movable, and M. Poncet decided to resect the fibula and tibia. It was then found that there had been very little loss of substance on the part of the graft, which was united firmly to the lower fragment of the tibia by fibrous tissue, but was separated by about a quarter of an inch from the upper fragment by weak fibrous material."

APPOINTMENTS.

H. CHARLES SMALE, L.D.S.Eng., D.D.S., has been appointed to the vacancy on the staff of the Victoria Dental Hospital, Manchester.

S. J. HUTCHINSON, M.R.C.S., L.D.S.Eng., has been appointed Examiner in Dental Surgery at the Royal College of Surgeons *via* J. Smith Turner, M.R.C.S., L.D.S., resigned.

NEW INVENTION.

New Form of Gold Cutters.

WE have received from Mr. C. Hunter a pair of plate-cutters to which he has attached a thin steel sheath, which practically forms a box in which are retained the cuttings that occasionally fly off and are lost. In a number of cases the instrument may be used with advantage and without inconvenience, but there are many occasions when the shield must prove a serious hindrance. For these occasions the inventor has indeed provided, by an arrangement which allows of the drawing back of the shield, but adjustments of this kind are always irritating. In the case of common tools, the fate of all ingenious modifications, which, useful sometimes are also sometimes more hindrance than gain, is to be discarded in the end; and we fancy that any workman, who has faith in his hand as the most efficient of all shields, will after a little while use Mr. Hunter's screw to withdraw his shield not backwards, but away altogether.

ANNOTATIONS.

OWING to some accident, possibly the loss of one of the sheets of names at the recent Dublin meeting, the list of those present was very incomplete. We have been enabled (thanks to the kindness of Mr. I. Renshaw, of Rochdale, who took the trouble to send us a long list of omissions, and to others who have helped us) to render the list in the volume of *Transactions* approximately correct, but if any gentlemen is still omitted, we trust he will attribute it to an unfortunate accident, the exact nature of which has not yet transpired.

WE learn to our great regret that a familiar face is about to disappear from the dental world in England. Mr. Thomas Gaddes, who has for so many years guided the fortunes of the National Dental Hospital, is about to retire from dental practice and permanently reside in America. Any one who has had the pleasure of attending the annual dinner of the students of that institution, will remember the kind of reception which the students (who are excellent judges of human nature) have always accorded to their justly popular Dean, and will therefore be able to judge how every-

one connected with his hospital will miss Mr. Gaddes. To enable him to receive the good wishes of his numerous friends, arrangements have been made to hold the Annual Students' Dinner of that institution on the 19th inst., at the Holborn Restaurant, Mr. Alderman Rymer in the chair.

IN our last issue, before the report of the Annual Meeting in Dublin, we printed the conclusion of the meeting of the Western Counties Branch. In case, in the interest that attended the larger gathering, any of our readers should have overlooked the smaller one, we would beg of them to turn back to page 549, and carefully read through the presidential address by Mr. Balkwill. It is a typical instance of a manly and straightforward manner of dealing with a difficult and delicate subject. In it he recognises the fact that underlying every expression of strong feeling, there is at least a substratum of truth, though in the desire to give due place to it there may be an unwise depreciation of other truths. Mr. Balkwill has the largest possible sympathy with the feeling that a profession should look within its own borders for guides and protectors of its legitimate interests, and yet on the other hand, he is sensible of the wrong and folly of doing anything calculated to awaken professional jealousies between ourselves and the medical profession. The claim which he puts in on behalf of the profession in virtue of the good and true work which it has done in connection with the pathology and treatment of the teeth and of anæsthetics, comes with all the greater force for the proud tone of honest humility in which he recognises what he regards as the lowly origin of the dental profession. Born of the craft of the goldsmith and bone carver, the profession has risen by the law of necessity and natural fitness, till its affiliation to the medical profession has become almost complete.

WE notice in a contemporary that a recent case of pyorrhœa alveolaris has occurred in an elephant. The more we investigate comparative pathology the more we learn that the brute creation do not enjoy any special immunity from dental troubles. Mr. Bland Sutton has opened our eyes considerably in this matter, and his indefatigable research has thrown the uncompromising light of science upon many weak points in the dentition of the lesser animal world. Perhaps the question that is so often asked us,

namely, whether in matters dental we are not much worse than our fathers, might be answered to some extent by the fact that dental surgery has longer and stronger sight now-a-days, that it is more difficult for imperfection and disease to hide themselves, and the fact that even elephants are developing pyorrhœa alveolaris might seem to point in the same direction. Science has such sharp eyes now-a-days.

STATEMENT of operations performed at the Dental Hospital of London, Leicester Square, from September 1st to September 30th, 1888.

Extractions :

Children under 14	...	...	...	...	519
Adults	...	...	...	...	1145
Under Nitrous Oxide...	...	...	...	...	675
Gold Stoppings	...	...	...	...	114
Other Stoppings	...	...	...	...	403
Advice	...	...	...	...	171
Irregularities of the Teeth...	...	...	...	...	33
Miscellaneous and Dressings	...	...	...	...	197
Total	...	...	...	...	3257

GEORGE SEYMOUR, *House Surgeon*.

STATEMENT of operations performed at the National Dental Hospital, from September 1st to September 30th, 1888.

Number of patients attended 2071

Extractions :

Children under 14	...	...	...	...	381
Adults	...	...	...	...	525
Under Nitrous Oxide	...	...	...	...	607
Gold Stoppings	...	...	...	...	53
Other Stoppings	...	...	...	...	340
Advice and Scaling	...	...	...	...	471
Irregularities of the Teeth...	...	...	...	...	68
Miscellaneous	...	...	...	...	113
Total	...	...	...	...	2558

E. C. FISK, L.D.S.Eng., *House Surgeon, pro. tem.*

STATEMENT of operations performed at the Victoria Dental Hospital of Manchester, during the month of September, 1888.

Extractions :

Children under 14	...	...	...	...	947
Adults	...	...	...	...	818
Under Nitrous Oxide	...	...	...	...	69
Gold Stoppings	...	...	...	...	52
Other Stoppings	...	...	...	...	90
Miscellaneous	...	...	...	...	248

Total 1277

CHARLES H. SMALE, L.D.S.Eng., *House Surgeon.*

STATEMENT of operations performed in Addenbrooke's Hospital, Dental Department, during the first six months.

Number of patients attended 509

Extractions 551

Extractions under Ether, Chloroform, and Nitrous

Oxide 21

Stoppings 69

Advice, regulation cases, scaling, &c. 82

Total 723

We learn that Mr. George Cunningham of Cambridge has extended his course of lectures on Operative Dental Surgery from two to three months, dating from Monday, the 8th October. The course is intended for advanced students and young practitioners, and may be taken as a post-graduate course, and those practitioners who have attended have had no cause to regret it so far. Besides the lectures there are four or five special clinics. The lectures take place on Mondays at 6.30 p.m. The fee for the course is two guineas and a half.

A SPECIAL general meeting of the West of Scotland Branch will be held on Thursday, October 25th, at 8 p.m., in the Hall of the Faculty of Physicians and Surgeons, Glasgow, to consider a proposal from the Scottish Branch, that the two branches should

merge into one—the Scottish Branch—whose headquarters should be in Glasgow.

It would be an impertinence in us to pronounce upon the scheme of fusion of the two northern branches of the Association, before the opinion of both the branches themselves has been definitely expressed. We have no doubt, however, that they will be guided by wise councils, and will decide upon the best course to pursue.

WE have received the October number of the *Independent Practitioner* of New York, and we notice that the title page bears the name of W. Xavier Sudduth, M.D., D.D.S., as editor, in the place of the familiar and respected name of Dr. Barrett. We cannot allow the retirement of Dr. Barrett to pass without a word of testimony to the manly and truly independent manner in which he has always conducted our contemporary; nor can we forget that from his prompt and generous action in the matter of the Waite Testimonial Fund dated a *rapprochement* between dentists on different sides of the Atlantic that is rapidly merging into a warm sympathy. Dr. Sudduth has displayed ability and scientific precision already, and no doubt will prove a careful and capable editor.

ODONTOLOGICAL SOCIETY.—The next meeting of the Society will take place on November 5th, 1888, when a paper will be read by Mr. F. J. Bennett, "On certain points relating to the Structure of Dentine," and a casual communication will be given on "Presentation of Models showing early development of Wisdom Teeth," by Mr. Boyd Wallis.

CHARING CROSS HOSPITAL.—The scholarship of fifty guineas, open to students of the Universities of Oxford and Cambridge, has been awarded to Mr. Albert Curling, of St. John's College, Cambridge. The entrance scholarship of one hundred guineas has been awarded to Mr. William Escombe, and that of fifty guineas to Mr. Percy J. Probyn.

WE are pleased to learn that there has been an exceptionally good number of entrances of new students at the Dental Hospital of London this October. The total so far is twenty-five, which we believe is a "record" entry.

CORRESPONDENCE.

We do not hold ourselves responsible for the views expressed by our Correspondents.

Double-Chambered Vulcanizers.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—Dr. Cunningham is in error in the introduction to his description of "Wirth's new apparatus for moulding and vulcanizing rubber and baking celluloid," which appeared in your last issue, when he says that Campbell's New Mode Heater inaugurated double-chambered vulcanizers, for he will find, by referring to the May number of *The British Journal of Dental Science* for 1862, that Mr. James Childs patented a double-chambered vulcanizer on the 21st of July, 1859,* so that the idea was very far from new when Campbell's New Mode Heater was introduced.

Although we held Mr. Child's patent until it expired, we did not make much use of it for the manufacture of double-chambered machines, because we found from repeated experiments that equal results could be obtained with single-chambered apparatus, every form of which is much simpler in working and less costly in construction. This was recognised by the patentee, for he observes in his specification, after speaking of two chambers: "I would also remark, that although a separate generator may be employed to ensure that the pressure of the steam should never exceed that which is perfectly safe, such separate generator may be dispensed with when using super-heated steam according to my invention. When I dispense with the use of a separate steam generator, then I introduce into the other vessel about as much water as will, when it is vaporised, fill the vessel with steam of a pressure such as I wish to employ, and I use a safety valve weighted to the desired pressure. By these means the vessel, when heat is applied thereto, will generate steam, and any excess will go off by the safety valve, and the remaining atmosphere of steam contained in the vessel will then become heated up to the high degree of heat desired, without so increasing the pressure as to be liable to injure the vessel."

When Dr. Seabury called upon us some time ago, we showed him the specification of Mr. Childs' expired patent, and he was so satisfied that his apparatus contained no new principle, that he abandoned the idea of attempting to protect it in this country.

There are a few points in Dr. Cunningham's paper which seem to us to call for comment.

* Mr. Childs exhibited the apparatus at a meeting of the Odontological Society of Great Britain, and subsequently read a paper on "Super-heated Steam," which is printed, with illustrations, in Vol., II., 1857-60, pages 181, &c., of the Society's Transactions.

On page 668 he states that the generator is furnished with a safety valve, which answers a given purpose. There is nothing new in this, for a safety valve can readily be fixed to any single-chambered apparatus, but what he describes as "the stereotyped unreliable and deceptive fusible plug" is generally preferred.

Our experience of the fusible plug, and we have tested it hundreds of times, is that, with ordinary care in raising the heat of the vulcanizer, it invariably blows out within a few degrees of 350° Fahrenheit—that is, at 35 degrees beyond the point recommended for vulcanizing dental rubber.

Again, on page 669, beginning at the first line, Dr. Cunningham observes: "The vulcanizing taking place in the superheated steam, the plaster in the flask remains hard and never becomes soft, as is so frequently the case in the ordinary bath vulcanizer."

By our method of working a single-chambered apparatus, the vulcanizing is done by superheated steam, and consequently, the plaster in the flask always remains hard, and we maintain that all the advantages which are claimed in the second paragraph, on page 669, can thus be obtained in an ordinary vulcaniser. We think Dr. Cunningham must have been in the habit of using too much water in the single-chambered apparatus. Our printed instructions on this point are as follows: "If wet plaster only is used for the generation of steam, the quantity contained in two flasks will be found sufficient, but if only one flask is put in the vulcanizer, a lump of wet plaster should be added. When free water is employed, a quarter of a pint is sufficient for all our wrought-copper vulcanisers." This, of course, equally applies to other machines of about the same size. "We may, however, add that we consider wet plaster far preferable to free water when the vulcanizer is in good order. If the vulcanizer be faulty"—by this we mean leaky—"wet plaster will not serve the purpose, nor can any given quantity of water be mentioned which would be uniformly suitable."

Yours faithfully,

CLAUDIUS ASH & SONS.

"More Worlds to Conquer."

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—I should be much obliged if you would allow me to point out in the columns of the Journal, that the field where its influence is most required is still without any branch of the British Dental Association. Will no one come forward and do something to start the machinery necessary to give to London the same privileges as are enjoyed by the provinces, for elevating the standard of culture in the dental profession.

There is now scarcely any town of importance, except London, which is not attached to a branch of the British Dental Association, and which cannot point to the beneficial effects such Association has produced.

Can we wonder that quackery and deception flourish, and that apathy is the characteristic of the *large majority* of the London dentists, when they are left without any influence in the management of the affairs of their profession, and have no opportunities for meeting together to discuss matters of political and social interest. All that is required is a few earnest men to come forward, and any difficulties in the way of forming a Metropolitan district branch of the British Dental Association could be easily overcome.

Hoping some of your London readers will express their opinions on the subject, or give reasons for their apparent inactivity,

I remain, yours faithfully,

"UPWARDS AND ONWARDS."

1st October, 1888.

American Dentistry.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

12, West Street, Boston,

August 30th, 1888.

SIR,—At the last meeting of the Harvard Dental Alumni Association held in this city, the following action was taken regarding advertising by some of its members.

Voted: "That the Harvard Dental Alumni Association discountenance any connection of its members with any advertising dental establishment; and whereas evidence has been presented that Drs. Curtis, Gerry, and Veo have become so connected with a dental office in London, they are hereby suspended from membership in this Association until they have discontinued their connection with such establishment."

C. WILSON,

Secretary Harv. D.A.A.

NOTE.—ANONYMOUS letters directed to the Secretary of the Association cannot receive attention.

P.O. Orders must be accompanied by Letters of Advice.

Communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

Subscriptions to the Treasurer, 40, Leicester Square.

All Contributions intended for publication in the Journal must be written on one side of the paper only. The latest date for receiving contributions for the current number is the 5th of the month.

SPECIAL NOTICE.—All communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

THE JOURNAL
OF THE
BRITISH DENTAL ASSOCIATION
A
MONTHLY REVIEW OF DENTAL SURGERY.

No. 11.

NOVEMBER 15, 1888.

VOL. IX.

The Journal of the Association.

IT has been the custom of those in whose hands the British Dental Association has placed the conduct of its Journal, to address the members and subscribers from time to time on the Journal and its affairs in the form of a leading article. By this means we are able to answer a great deal of correspondence which it would be impossible to deal with in any other manner, to take our readers into our confidence, and endeavour to explain away any little difficulties, and smooth down any little angles, the existence of which seem to be a necessary concomitant of journalism.

We have heard in one or two quarters lately an expression of dissatisfaction, hardly amounting to a formal complaint, to the effect that the Publishing Committee are in the habit of arbitrarily suppressing unwelcome letters, even coupled with the suggestion that they have no right to do

so. A word of explanation on this point will, we hope, set the matter quite straight. The Publishing Committee have very rarely objected to the publication of a signed letter, and on those rare occasions it has been upon the very gravest grounds. The Publishing Committee are responsible to the Association for the conduct of the Journal, and when they are advised by their solicitors that certain statements would involve the Association in a profitless libel suit, or would otherwise prejudice the position of the Association from a legal point of view, the Committee have acted and will continue to act upon such advice. So long as the Committee exists it will endeavour without fear or favour to do its duty in guarding the Association from being placed in any false position. Moreover, we would add that the fact of subscribing to the Association does not convey a right to fill as much space as the subscriber likes in the Association Journal; if it is to be so understood, we must quadruple the subscription and bring out a much larger journal, and establish a handsomely supported guarantee fund for legal expenses. At the same time the Committee would as a consequence be compelled to abrogate all discretionary power, and the reason for its existence would cease. In this connection the sub-editor has a pleasanter task to perform than either that of complaint or of explanation, namely, that of thanking the members generally for the considerate manner in which they have received his suggestions when he has thought it expedient to advise the withdrawal of a letter or an article. In such cases he has always met with courtesy and almost always with acquiescence.

Another difficulty is that which arises in connection with the excision of doubtful paragraphs or the shortening of speeches which lack but one merit—that of brevity. With the development of the Branches this difficulty increases.

There was a time when Editors lacked matter, and the story goes that when journals were in their infancy there was a publisher who, when news ran short, filled vacant columns with passages from Holy Writ ; so that the judgment of Solomon was beside the trial of Charles, and the war in Scotland kept company with the Jewish fightings of the book of Kings.

That happy day is over, and how to compress ten pages into two is the Editor's problem in all journals where, as in ours, considerations of printing and postage clearly limit space. Whether that work on the whole is done with fairness and courteous consideration it is not for us to judge ; this we know, it is done with a wish to be fair and a determination to be considerate. Apart from the mere question of space, there are observations made in the heat of discussion or the genial warmth of after-dinner oratory which by implication affect individuals ; in speech they pass, but in print they put on a more formidable front. There are jests—for dentists do sometimes jest—which ask a little good nature to make them pass current, and others which depend on the atmosphere that envelops them for their point and brilliancy, and these in the coldness of the printed page would fail. We must all feel at times that the best humour of some of our humourists may occasionally require the support of adventitious circumstances.

Considerations of space, the unconscious possibility of the spoken word in which lies power of offence, the casual observation in which may lurk a joke which, too trifling to bear repetition, is yet capable of lightening a moment's argument—all these and other considerations underlie those curtailments and excisions which make the speech, whether made in council or at well-filled board, seem insufficient when reported in our pages ; it is, however, so easy to forget all this, that it is not surprising if occasional complaints are

heard as to the conduct of the Journal. These considerations are, however, so evident when stated, that we have no doubt but that our readers, once reminded of them, will see that many, if not all, their causes of complaint are capable of explanation. We hope that the criticism which proceeds from a desire to improve and not from a love of complaint, will find in these suggestions ground for the generous admission that actions hard to be understood are often capable of justification.

ASSOCIATION INTELLIGENCE.

Central Counties Branch.

THE Annual Meeting of the Central Counties Branch was held at the Imperial Hotel, Malvern, on Thursday, October 25th, when there were present:—Mr. W. E. Harding (Shrewsbury), President Messrs. C. Sims, F. W. Richards, F. H. Goffe, E. C. Sims, W. Palethorpe, John Humphreys, Dr. Hogben (Birmingham), W. H. Waite (Liverpool), hon. secretary, Midland Branch; Walker (London), W. Booth Pearsall (Dublin), hon. secretary, Irish Branch; W. Helyar (Bristol), W. Barkley, W. Graves Morris, N. J. Surman (Worcester), T. E. King (York), H. N. Grove (Walsall), G. F. Holme (Malvern), Clifford Batten (Kidderminster), J. L. Robertson (Cheltenham), N. Owen (Wolverhampton), &c.

Mr. W. E. HARDING occupied the chair at the commencement of the meeting.

The SECRETARY read the minutes of the last meeting, and they were adopted unanimously.

On behalf of the Treasurer (Mr. F. E. Huxley, M.R.C.S., of Birmingham), the financial report was read by Mr. C. Sims, and adopted unanimously. An expenditure of £12 18s. 3d. was shown; balance due to the treasurer, £4 8s. 3d. In view of the deficit, the President consented to bear the cost of the item for refreshments, and the statement was adopted minus that amount.

The following appointments, as recommended by the Council, were confirmed: Mr. R. F. H. King, of Newark, *President*; *Vice-presidents*, Messrs. Sims and Thorman; *Treasurer*, Mr. Huxley re-elected; *Secretary*, Mr. Humphreys re-elected.

The CHAIRMAN proposed Newark as the next place of meeting, and June as the time.

Mr. MACADAM seconded the proposition that the next meeting be held at Newark, in June. Carried unanimously.

Mr. WAITE thought that, as the branches were extending, it would be well to consider the question of boundaries. He suggested that it should be done upon a geographical basis. It would be undesirable to cross one another's paths. On the broad ground of the general good he thought it would be well to take up their positions and confine themselves pretty well thereto.

Mr. C. SIMS said this had been before the Council and was felt to be a matter of considerable difficulty. They had less difficulty as to the Central Counties Branch, as Birmingham formed nearly the centre of England, and they took a radius of fifty or sixty miles. But while this was a wise and proper course, he thought other districts would find greater difficulty. He could not say whether he would recommend confining a district to any particular county.

Mr. WAITE suggested a conference of secretaries and presidents with a view to arriving at a settlement, by which it could be done without friction.

Mr. C. H. SIMS proposed and the Chairman seconded: "That this meeting considers it advisable, on the suggestion of Mr. Waite, that a conference be held, consisting of the presidents and secretaries of the various branches in England of the Association, to consider the amicable re-adjustment of their boundaries."

Dr. WALKER suggested that the parent society be consulted.

Mr. WAITE said it was the policy of the district associations to manage their own affairs, though bye-laws must be approved by the Representative Board. He thought that after a definite plan had been agreed upon it would then be courteous to submit it to the Representative Board.

Dr. WALKER said that was rather his feeling. If the branches became so numerous that they had to consider boundaries it would be wise to meet and discuss, but before action was taken the question should be considered by the Representative Board.

Mr. SIMS' experience led him to anticipate that such would be the course proposed even if they just took the matter before the Board. The resolution was adopted.

The following gentlemen were elected members of the British Dental Association: Messrs. W. Barclay, R. J. Surman, L. J.

Machin, and W. Graves-Morris, of Worcester; and Mr. G. C. Holme as an Associate of the Central Counties Branch.

The PRESIDENT then said, the time had now come when he must resign the chair. They had had rather a successful year. They had had four casual meetings, some of which had been of very considerable interest. Papers had been read and exhibits shown, including very interesting cases of epulis and odontomes and specimens of ancient mechanical work, water motors, and ingenious electrical apparatus. In the revision of the Dental Register, thanks were largely due to Mr. Waite, by whom a great deal of the ferreting out of names had been done. A very great improvement had thus been made upon the previous list, and it remained with them to keep it up to its present standard of correctness. It was impossible the secretaries could be aware of all changes; and individual members should attend to their own neighbourhood, carefully watch for deaths or removals of present practitioners, otherwise in ten years it would be in as bad a state as before. Proper registration was of the utmost importance to maintain the integrity of the Dentists Act. If they could decide to work in districts and compare their record with the Register from time to time, they might still more improve the Register. He thanked them for their kind receptions at various meetings, and resigned his seat to Mr. MacAdam.

The SECRETARY intimated that letters of apology for non-attendance had been received from Mr. T. Crapper, Mr. Roff-King, and others.

Mr. PEARSALL suggested that the secretaries might be notified of deaths, by a marked newspaper.

Mr. WAITE said the only legal proof was a certificate of death or burial.

The PRESIDENT-ELECT then took the chair. He referred to the incalculable benefit of these meetings for the professional and also the social points of view. He alluded to the energy displayed by their secretary, and their obligation to Mr. Holme for the help he had afforded in making the local arrangements for the meeting.

On the motion of the Secretary, seconded by Mr. C. H. Sims, a vote of thanks was accorded to Mr. Holme.

Dr. E. HOGBEN then read a paper by Professor Windle, entitled, "The Influence of the Nervous System on Dental Abnormalities and Lesions" (see p. 773).

After partaking of luncheon at the Imperial Hotel, to which

Mr. MacAdam, the President-elect, had invited all members and their friends, the company witnessed demonstrations in plaster impressions by Dr. Walker, and in gold filling by Mr. W. Helyar. There was an exhibition of removable crown and bridge work, with models, by Mr. John H. Gartrell.

Mr. F. E. HUXLEY showed an improved hospital chair.

Mr. W. E. HARDING moved a vote of thanks to Mr. Gartrell, who had not, like some of their friends across the Atlantic, taken out a patent, but seemed to desire that his invention should be used for the good of humanity.

Mr. PEARSALL seconded. He characterised the work as one of the most ingenious things that had been brought before the attention of British dentistry. Dentistry really had no nation, though in America there were some who claimed to belong to a new and very advanced school. Mr. Gartrell's work required delicacy and intelligence. It was a revelation to him that an upper could be worn, without any plate, with comfort. In suitable cases, with healthy roots, he thought there was a great future for the system. Sometimes bridge work was attempted on bad roots; but the operator who could do that for the sake of an extra fee was not worthy to be a dentist. They should try to be both artistic and scientific. The British Dental Association brought men together who were in earnest to develop the profession; and he hoped when they saw a good practical thing that was beneficial they would not hesitate to give it attention.

After a little further conversation,

Dr. WALKER opened the discussion upon Dr. B. Windle's paper. If it was true that this step of development could be so defined at the fifth month of foetal life, an analogy could be drawn as to the amount of development of the dental organs. If imperfect enamel was due to want of nervous power, and this could be ascertained, they might look for remedies. It would be for the physician to find out how to give that power, and if he could do that, he would receive their hearty thanks. He referred to a common query of mothers as to why "four girls had good teeth and another bad, and what might they expect as to the next?"

Mr. HUMPHREYS referred to the careful observations which Dr. Windle had for a long time been making, and said that he was going to read a paper on the "Premaxillæ." He also spoke of his kindness and energy on behalf of the students in the Dental School at Birmingham.

Mr. PEARSALL could not agree that all the remarkably shaped arches showed imperfect intellect. It would be well when marked abnormality was seen to send particulars to the museum, with careful remarks as to the intelligence of the individual. There should be no bias in so doing, but the observations must be taken impartially and with exactness. There were to be found abnormal arches among men and women who had distinguished themselves in art, literature, &c. He thought it a pity the Association had not an investigation committee to give attention to such cases, and that much valuable material thus was wasted, though he believed there was now some improvement.

Mr. MACADAM believed that a great many cases were due to enlarged tonsils and the attempt to breathe with the mouth open.

Dr. HOGBEN, in replying, indicated his concurrence with the theory as to the causes of the malformations referred to. As to imperfect enamels being due to want of nervous power, he was hardly inclined to think so. Epithelium existed in embryo long before nerve was able to be differentiated at all, and he did not think such slight disorder as enamel irregularity could be due to loss of nerve power. He rather believed the great majority of enamel defects were due to syphilis, ricketts, or early stomatitis. Not noticed by mothers, it never came under the notice of the dentist before he was asked his opinion about a disease which was really due to a malady which existed before the tooth. As to the remarks about the mother with four girls with good teeth, one with bad, and wondering what to expect with the next; it might be the mother was advanced in life, that by bearing of children her own health was beginning to be impaired, or the embryo had not the same power to resist infantile disorders. While it could not be doubted that there were people with malformations of the arch who had come to the front in mental capacity, there was another side to consider; if any one of them had been associated with an idiot asylum as medical officer, they would be struck with the number of deformations of one kind or another. He had not met with a case he could attribute to enlargement of the tonsils, but he believed it to be owing to the early ossification of the palate process of the superior maxilla and palate process of the palate bone which occur in intra-uterine life.

The meeting shortly after terminated, and the party left for a drive to the quaint town of Ledbury, *via* Eastnor Castle and The Ridgeway, and eventually dined together at the Feathers Hotel.

West of Scotland Branch. .

A SPECIAL general meeting of the West of Scotland Branch was held in the library of the Hall of the Faculty of Physicians and Surgeons, Glasgow, on Thursday, October 25th, at 8 p.m., Mr. James Cumming, President, in the chair.

The proposal of the Scottish Branch for union with the West of Scotland Branch, under the title of the Scottish Branch, with headquarters in Glasgow, was then considered.

Mr. BROWNLIE said: When this proposal was under discussion at the Annual Meeting of the Scottish Branch, speaking from an Association point of view I could not see my way to commend it. Further consideration has not led me to depart from that view, nor is there anything from a Branch point of view to lead me to think better of it. The proposal is in effect this:—the West of Scotland Branch is to cease to exist by assuming, in place of its own, the designation of its neighbour, and the inducement is the increase of the membership of the Association and the consolidation of the Branches. If consolidation is desirable, it should be carried to its fullest extent. The Branches might be reduced to one in each division of the kingdom, and these might be still further consolidated into the British Dental Association itself. The effect of this would be to paralyse the Association by rendering it quite insufficient for the work it has undertaken to do. Had the proposal been to double the number of the Scottish Branches there would have been reason in expecting from it an increase of members. The proposal being in the opposite direction, must be credited with an opposite effect. If it did not diminish it would do nothing to increase the membership.

We may not place much importance upon arguments drawn from the draft suggestions on the paper. They are there only as suggestions. But before we can decide, we must see whether the plan will work. It is suggested that there should be two committees or councils, an east and a west, for carrying on the legal work in each district. This suggestion seems to me to negative the proposal. If there be need for separate committees, there is still greater need for separate Branches.

Let us consider for a moment the effect of amalgamation. The amalgamative Branch would certainly be stronger—on paper—than either of the two existing ones. That it would be really stronger I do not believe. To work the two committees would

entail the regular attendance of the members of committee at our monthly meetings, otherwise the Branch could not be held responsible for their proceedings. To require the attendance of members of committee and ordinary members at these monthly meetings, would be to provide them with a just cause of complaint—a standing grievance, sooner or later leading to further change. Are we ready to repeat the experiment made long ago by the Odonto-Chirurgical Society, which proved a complete failure, of holding half our meetings in the east and half in the west? On the other hand, is the West of Scotland Branch to sacrifice its identity and throw open its doors for those who would not feel disposed—under ordinary conditions—to take advantage of our arrangements on their behalf?

Members of this Branch cannot yet have forgotten the losses entailed by the conversion of the L.D.S. Society. The advantage in that case was evident, yet it cost us fully a third of the membership. Unless past experience is to be thrown aside altogether, we ought, I think, to abide as we are until it can be clearly shewn to be to advantage to amalgamate. Surely we have had enough of change, and now that we as a Branch are settled on so satisfactory a basis, it will be more to the purpose that we use our organisation for the purposes for which it was intended. It is perfectly competent, as it is, to do all that can be expected from it, and there is no lack of work lying ready to our hands. The proposal appears to me a mistake. It would help the Scottish Branch in its dilemma, but it argues no lack of sympathy or desire to help, that we decline to enter with it upon an arrangement which must damage an effective Branch upon a more than dubious prospect of aiding the other.

Mr. CAMPBELL said: I am in favour of union, as I do not think there are, as yet, members enough in Scotland to support two branch societies with anything like vigour and success. The classified table of dentists practising in Scotland, put together by our Secretary, Mr. Price, will show this at a glance. From this list we see there are only sixty-six members of the parent society in Scotland, and since this list was printed there is one less, making sixty-five. Fifty-one of these (including the Edinburgh members) are in, or within an hour's distance of Glasgow, where it is proposed to hold all meetings except the annual one. Of the remaining fourteen members, two are within an hour and a-half, and six within two and a-half hours of Glasgow. It seems to me

ridiculous to speak of a northern branch as we have only ten members north of the Tay, and I question even if we were sure of all the men eligible for membership, whether the members would be sufficient to form a branch—certainly the numbers would not much exceed this—and being so scattered, would at best be a weak one. I do not see how we, the Western Branch, could in any degree be weakened, or our meetings of less interest, by the union.

Whether the members at present forming the Scottish Branch came to the ordinary meetings always held—as it is proposed—in Glasgow, or not, we could at least always rely upon a large annual meeting. If the union were brought about the annual meeting would, as has been the practice of the Scottish Branch (indeed if I mistake not it is the custom of all the Branches) never be held twice successively in the same town. I believe no better plan could be devised to get lagging members of the profession to join our society than the principle of itinerating. We know by experience that in this way members are added to the Society annually. When the Scottish Branch held its meeting in Dundee, I know we added to our numbers.

Now, how is this principle to be carried out with two societies in Scotland? The branch societies in England, I believe, each embrace a greater number of towns and are nearly, if not quite, as far apart from each other as we in Scotland, if we leave out Inverness with its one member.

Mr. REES PRICE said: I am in favour of the union of the two branches, since I believe that in this will be attained the best interests of the British Dental Association. With regard to what Mr. Brownlie has said as to the logical outcome of a union of two branches, I think it should be borne in mind that of the 4,900 registered dentists in Great Britain, there are but 314 in Scotland, good, bad and indifferent. With about 120 in Ireland, this would leave considerably over 4,000 dentists in England, with but five branches of the British Dental Association—one branch to about 800 registered men.

With but a possible membership of the British Dental Association of 150, there is not room for two flourishing branches in Scotland, as the sequel has shown. Further, there are but sixty-six members of the British Dental Association in Scotland. There ought to be many more; but with two branches and no defined district, there is considerable overlapping, and many towns have

not been worked for membership. To my mind, what is wanted is an increased membership of the British Dental Association. Whether men belong to a branch is of secondary importance. With one branch and a strong working executive, efforts could be made by personal influence in this direction, and with probably the same successful results as with the Midland branch. It must not be forgotten that the West of Scotland Branch is unique in holding monthly meetings during the winter in one town and this alone. There can be no doubt that the success of the Midland and Western Counties Branches has largely lain in the fact that they have from time to time held meetings in different towns over a large area, and thus have brought dental-surgeons in different districts into personal contact, and have interested them in the work of the British Dental Association. I fail to see how this could be attained by having three or four branches in Scotland, as one member has suggested, even if three or four branches were possible. I feel that under present conditions the Association and the West of Scotland Branch can never assume the importance or have the influence that they should and ought to have.

Messrs. Biggs, Melville, Lipscomb, Oswald Fergus, M'Cash, W. S. Woodburn and Cameron, also took part in the discussion.

Mr. CUMMING (President): Gentlemen, it has given me great pleasure to preside at this special meeting. I have listened with deep interest and attention to the discussion on union between the Scottish Branches of the British Dental Association. Of those present to-night I suppose six are members of the Scottish Branch, as well as the West of Scotland Branch. It gives me hope for the future that such a subject can be discussed so amiably, and I think I may add, so thoroughly. Being the last to speak on the subject, I find you have left little or nothing for me to say.

At the same time, I desire that no uncertain sound should proceed from the chair; therefore I will decidedly say that I am of opinion that no union should take place at present between the Scottish Branches. To enlarge upon the subject to any extent would be to go over ground that has already been so well taken up by Messrs. Brownlie, Woodburn, Fergus, Lipscomb, and others. I shall therefore simply say a word or two on what has fallen from Messrs. Biggs and Campbell in favour of union.

To make their case stronger, they remind us that they have in a manner but one meeting in the year; and that they have the Odonto-Chirurgical Society of Edinburgh, which, they say, takes

up nearly the entire interest of the members of the Scottish branch with scientific subjects.

Now, gentlemen, I do not think we should look upon that statement as a favourable ground for union. As we are constituted here in the West, we may take up a scientific, dental, or mechanical subject ; but if our Edinburgh friends exhaust themselves on purely scientific subjects in connection with the Odonto-Chirurgical Society, it explains why they do not adopt our plan of having seven meetings in the year to discuss any subject of interest to the profession, and so keep their Branch alive. I think this plan would be better for all other branches as well.

Under this view that the Odonto-Chirurgical Society is enough for them, what accession of strength would they be to us? or to the Association? Our meetings are held in the winter and spring months, when the weather at best is uninviting to travel, and a "bad day" would have to be taken as an excuse for not travelling so far. They might therefore simply swell our numbers, without much benefit in the way of papers. Or they might give us "cauld kail [from the Odonto-Chirurgical Society] het again." I have often found this assertion good, both literally and metaphorically. I know our friends intend nothing but good, and what they would give would be good ; but then, the true interests of the British Dental Association would not be served by such a union of the Branches.

I believe our Edinburgh friends are quite as able as we, to make their Branch as successful and interesting as this. What is a tree without branches? And if, on our side of the trunk, standing as it does to the bleak north, not favourable for great expansion, there be now only two branches not thickly embellished with leaves, would it not be unwise to graft the one into the other to try to make one goodly branch with a fair number of leaves? It would be all one-sided in a manner, from the northwest ; whereas, as they are, they are far more graceful, one peeping from the northeast, the other from north-west, as hardy sprigs, striving to do their best, not willing to lose their individual attachment to the parent tree. Besides, the frosts of winter might, even before the grafting process was fully complete, and before what was once the West of Scotland Branch could gain strength for the extra burden, there might be a sad rent, and both Branches and the parent stem would suffer. The Scottish Branch, in their statement, try to put all such fears aside by giving us everything but the name. But let us both have a name. There is room.

Finally, the following resolution was proposed by Mr. J. R. Brownlie, seconded by Mr. Rees-Price, and carried unanimously, "That in view of the divided state of the opinions expressed by the members present, it is desirable to hold over the proposal for further consideration."

The next (Annual) Meeting of the Branch will be held on Thursday, November 22nd, at the Faculty Hall, Glasgow, at 8 p.m., when, in addition to the business pertinent to the Annual Meeting, several casual communications have been promised.

At a recent meeting of the Committee of Management of the Glasgow Dental Hospital, Mr. W. Holt Woodburn, L.D.S. Glas., D.D.S. Mich., was elected as assistant dental surgeon, Dr. Boyd and Dr. Wallace Anderson were elected anæsthetists, and Mr. J. Biggs, junr., was appointed House Surgeon, *vice* Mr. J. Stewart resigned.

Midland Branch.

ON Saturday evening, November 10th, a meeting was held at the "Trevelyan Hotel," Darlington. Present: T. E. King, Esq., President, in the chair. Messrs. G. Brunton, J. Charters Birch (Leeds), G. G. Champion (Manchester), J. W. Dent, A. E. Knowles, M. D. Wood (Stockton), A. B. Harrison, R. Turnbull (Newcastle-on-Tyne), W. Glaisby, A. G. Rayner (York), W. Fothergill, A. Fothergill, J. A. Fothergill, E. Cowper, J. G. Foster (Darlington), J. C. Storey (Hull), E. N. Washbourn (Ripon), W. Somerville Woodiwis (West Hartlepool), A. W. Thompson (Durham), I. Renshaw (Rochdale), W. H. Waite (Liverpool), and several visitors.

In opening the proceedings, the president expressed the pleasure it gave him to see so many members present at the first dental meeting in the Northern Counties, and asked for "Casual Communications."

Mr. STOREY exhibited models of syphilitic teeth; also models of an interesting case of torsion, giving details of the same.

Mr. BRUNTON shewed a method of producing a reticulated surface on gold plate, by rolling a piece of glass paper through the mills with the gold; a patent screwdriver and holder for disc carriers, emery disc cutters, ligature thread matrices and ap-

pliances, Dr. Elliott's handpiece, rubber regulating rings, rubber dam punch, ethylate of sodium (escharotic), and some natural teeth which have been sent from Florence, repaired by splicing with sections of mineral teeth, &c., &c.

Mr. A. HARRISON (Newcastle), read the following short paper on "Restoring Fractured Teeth."

The subject I have chosen for my paper to-night is one to which I have given a deal of attention of late, and one that has been rather neglected, as I do not remember having heard of a similar paper being read before an Association meeting.

Since athletics have become so very popular, more especially cricket and football, fractures of the front teeth are more common, and as the majority of such accidents occur in young people, where it is undesirable to insert artificial teeth, I thought a short discourse on the best means of treatment would be interesting.

The models which I show you are not specially prepared, but are in reality, facsimile of cases which have occurred in my own practice during the last twelve months.

I will begin by enumerating the different kinds of fractures :

First, we have teeth whose cutting edge is only slightly broken.

Secondly : Those where a considerable portion of the tooth is lost, but *not* exposing the pulp.

Thirdly : Where the fracture has exposed the pulp.

Fourthly : Those where the fractured portion of the tooth is held *in situ* until advice is sought.

We will now go to the treatment of *Case I.*, where the cutting edge is slightly broken. This, I think, will be treated by trimming down with suitable files or corundum wheels, and leaving a fine, smooth edge. If, however, the fracture is too extensive for that, building down with gold, or rather making a gold tip, would be best.

Case II. Where the fracture is considerable, but *not* exposing the pulp, we begin by filing a smooth, flat surface, and then taking an impression, being careful about the lingual side of the tooth. A model in zinc is now cast, and a small plate of No. 4 platinum (soft) is struck up, extending the fractured surface, within $\frac{1}{8}$ of an inch from the labial side, and covering the whole of the palatal portion ; the little plate is placed on the tooth in the mouth and two small holes drilled through it and into the tooth on each side, and parallel with the pulps, to the depth of $\frac{3}{16}$ of an inch ; two small platinum pins are inserted in the holes and projecting through the plate and now waxed, removed, invested, and

soldered with pure gold. After trimming off the pins, you now find a suitable tooth in colour, very short, and with the pins low down; this is fitted very carefully to the fractured surface (the success of the operation greatly depends on the manner in which this is done), it is then backed with platinum, and waxed to the plate and the whole tried in the mouth. After being satisfied that you have it in position, invest, solder and polish; it is then ready for fixing. The tooth must be perfectly cleansed and dried; some Fossiline is then mixed to a creamy consistence and a little forced up the holes and spread on the palatine surface, then place on your porcelain tip and cap; hold until the cement sets.

Case III. When the fracture has exposed the pulp. First devitalize and extirpate the pulp, then enlarge the canal and prepare the fractured surface as in previous case; take an impression and make a cap, also as before, place it on the tooth and drill a hole corresponding to the opening of canal, invest a long platinum pin, allowing the end to project, wax to plate, invest and solder, select a suitable tooth, fit it to the broken surface, back, and wax it to plate; after trying in, remove and solder; it must be fixed with Fossiline as before.

Case IV. Where the tooth is fractured vertically, extending from the gum to cutting edge, and is held *in situ* by the soft parts. This, of course, will involve the pulp, which (after detaching the broken part) must be extirpated. Wax the detached part to the tooth left standing, care being taken to wax on the front; take an impression of the palatine portion and make a plate of platinum to cover the surface, place on tooth and drill a small hole on each side, that is, one on each part of the tooth; after filling the canal, cement the broken piece on to the part standing, and when hard cement on your plate and insert two small pins in the holes; when all is quite set, level with the plate.

Mr. BRUNTON said that in his experience "Flagg's Plastic Enamel" was the best cement for all cases of this kind, also for setting gold crowns, bridge work &c., &c., as it is slow setting and affords time for delicate manipulation.

Mr. GEORGE G. CAMPION described a case of restored fracture done three years ago, and still in good condition.

Mr. RENSHAW preferred treating the third class of cases mentioned, by excising the whole of the crown and fitting a Balkwill tube and pivot.

Mr. DENT (Stockton) exhibited an appliance for holding coffer dam in position, and to act as a duct compressor.

The PRESIDENT then called upon the Secretary to address the meeting.

Mr. WAITE commenced by apologising for the absence of their esteemed friend, Mr. S. Wormald, which, he regretted to say, was caused by the unsatisfactory state of his health. This was the first occasion on which Mr. Wormald had been absent from a meeting of the Midland Branch, after which he proceeded to say :

Before entering upon the particular topic allotted to me, perhaps I may be allowed to make one or two general remarks. At the Annual Meeting of the Central Counties Branch, held at Malvern a fortnight ago, I ventured to suggest that the time had come when it was desirable to define the boundaries of the several branches ; a resolution was carried affirming the necessity, and requesting me to arrange for a Conference of Presidents and Secretaries to adjust the boundaries. This, I hope, will be done, and it will tend to consolidate and concentrate the efforts of Members in their several districts.

There has been some enquiry about the Geographical Register. At a meeting of the Representative Board in August, 1887, it was resolved that copies of the Register should be prepared in geographical order for the use of Local Secretaries in assisting the revision of the Register. The method of preparing these was as follows : two copies of the ordinary Register were taken and each name cut out separately in slips ; these were then arranged in order of place, *e.g.*, all the names belonging to Leeds were pasted together on a sheet of paper, and so on with every town in the kingdom. The sheets were placed in alphabetical order, and the Geographical Register was complete. The cost of this work was reported to be over ten pounds per copy, and at a subsequent meeting of the Board it was stated that only two copies would be prepared. One of these was forwarded to me, and I have to report the use I made of it. Immediately on its arrival we set to work to prepare lists of names of all registered dentists in every town in the Midland district. These lists were sent to responsible Members in each town who had kindly consented to act locally in assisting the revision of the Register. In addition to these which belong to our own Branch, several lists were sent to gentlemen in various parts of the country for the same purpose. Through this channel I am able to state positively and can produce the highest testimony to the fact that a large amount of most valuable information was obtained, which proved of great assistance in the work of revision. So far

as the Midland Branch is concerned, therefore, the remark contained in the Annual Report presented at Dublin is not correct. The area of that remark is limited. I do not deny that there may be some force in it, but I desire that the force should be directed towards the right quarter. The copy entrusted to me is now in the possession of the Secretary of the Scottish Branch.

There is another remark in the Annual Report to which I will refer, viz., that the secretaries of branches have not availed themselves of the privilege of attending the meetings of the Business Committee. Now, I do not hesitate to characterise that remark as both ungenerous and unwise. It was never contemplated that local secretaries would attend except, as stated by myself in making the original suggestion, when there was any particular business relating to their respective branches. The meetings of the Business Committee are always held in London, sometimes at very short notice, and I repeat, the remark contained in the Report is both ungenerous and unwise.

While speaking about the Annual Report, I think we might with advantage follow the custom adopted by many incorporated Societies, viz., have the report and statements of account printed and circulated among the Members before the Annual Meeting. This would enable the Members to look over the various items, and they would then be prepared to express an intelligent opinion thereon.

Coming now to the question of the Northern Branch, I find that there are in the four counties, Durham, Northumberland, Westmoreland, and Cumberland, twenty-two Members of the British Dental Association. Beside these are several others who might become Members if the matter were brought under their notice. Thus you have a nucleus of a branch ready to hand, and it is entirely a question for those who reside in the district. The advantages of forming a branch are obvious. It creates a local interest in the affairs of the general body. It affords a platform upon which local practitioners can meet. It gives the Members of a district a direct voice in the management of the Association; and, last but not least, it furnishes opportunity for the development of energy and ability, otherwise dormant, while to crown all, it opens the way for the exercise of the noblest principle of which human nature is capable, viz., the sacrifice of self to the general good. The only drawback in this case, as far as I can see, is the fact that such a branch would necessarily be a small one, because the total number of practitioners in the district is not large.

Speaking on behalf of the council of the Midland Branch, I may say we have already detached one company who have formed the Central Branch. Our object from the beginning has been to promote the general extension of the British Dental Association, and not merely to expand the Midland Branch. The area we cover at present is inconveniently large, and we only hold the ground until others are ready and willing to take it up. We should gladly give every assistance in our power to a vigorous effort to establish a Northern Branch, but, on the other hand, we should be sorry to relax our hold unless we felt sure the work would be more efficiently done.

Geographically considered, these four counties are quite as conveniently situated as any other district of the country, and being somewhat remote from the more populous centres, it would appear natural that you should draw together more closely and form a branch of your own. However, I am not here to urge the matter by any means ; my business is simply to call your attention to the subject and endeavour to arouse your enthusiasm, so as to induce you to feel an interest and take your proper share in the great work of purifying and elevating the dental profession.

Gentlemen, whether you form a Northern Branch or no, is a small matter ; it is for you to consider and for you to decide. But the general management of the British Dental Association, carrying with it, as it undoubtedly will in the future, the entire control of the affairs of the profession—that is a most important matter, and to that I would bespeak your earnest and thoughtful attention. It concerns you personally now, and it concerns those who will come after you still more. It demands, because it essentially requires, the intelligence, the perseverance, the patience and the self sacrifice of our best men all through the country. The Association cannot be wisely guided on any limited or narrow basis. Its success in the near, not to say the remote future, depends on the breadth and generosity of the principles on which it is governed. Progress cannot be secured save by the common resolve and the patient perseverance of all sections, along with the common determination to know nothing and to do nothing but that which will subserve the general welfare of the whole body. Indifference, inactivity, “let other people do the work, I have something else to do,” &c.—these are false guides. The duty of managing the affairs of the dental profession has devolved very properly on the members of the pro-

fession, and it behoves them to seize their privilege with courage and determination. Just as no outsider could understand our affairs, so the residents in one district cannot fully understand the requirements of any other district. It is absolutely necessary, therefore, that every district and every interest in the profession should be alert, so that what is done may be done wisely. Whether you form a Northern Branch or not, I trust that our northern brethren will henceforth take an active and persevering part in the general work of the Association, and thus strengthen the hands of those who represent your interests in the councils of the British Dental Association.

Mr. KING said : We must all feel very much indebted to Mr. Waite for the trouble he has taken in introducing this subject for our discussion. He has had considerable experience, and we must all feel the weight of his observations. I have lately been looking up the subject of associations and their various rules and regulations, and have had no difficulty in finding plenty of material. In many important respects our Association differs from, and compares unfavourably with, most of the others, so much so that I have sometimes felt ashamed of it. Associations are powerful instruments for producing beneficial influence and giving to their members opportunities to express their minds on matters concerning their interests. The first thing is to promote organization in all parts of the country, and, I think, this can only be done by the formation of numerous branches, and by each branch sending a delegate to represent it at headquarters ; this is the fundamental part of all the associations I have so far come across. If the north of England men do not wish to be left out in the cold, the sooner they look after their interests and form a branch the better. I should like to see a strong and influential branch formed worthy of the importance of the towns which would be included in it. With a University having a dental school in connection with it, and with large towns like Newcastle and others, it seems strange that this important district remains without, and is content to remain without, any means of making its voice heard on matters concerning the interest of our important profession. When branches practically cover the whole country they will be able to stimulate, direct, and make the Association representative and effective, which I very much regret to have to say it is not at the present time.

Messrs. J. A. Fothergill, A. Fothergill, G. Brunton, A. Harrison, J. C. Storey, E. Cowper, J. A. Dent, W. Somerville Woodiwis,

and J. C. M. Birch, took part in a general discussion as to the advisability of forming a Northern Counties Branch.

Referring to Newcastle and district, Mr. Harrison stated that in a population of 230,000, with a large number of dentists, there were only four members of the British Dental Association; the general feeling of the meeting was that the establishment of a branch could not be otherwise than beneficial to the profession and to the Association.

This discussion concluded the business, and after the usual votes of thanks the meeting terminated.

MEETING OF THE MEMBERS RESIDING IN THE NORTHERN COUNTIES.

Following the above, a meeting took place at which resolutions were passed affirming the desirability of forming a Northern Counties Branch, and appointing a committee, consisting of Messrs. J. A. Fothergill (Darlington), A. Harrison (Newcastle), and M. D. Wood (Stockton), to test the opinion of members throughout the district, and ascertain the possibility of obtaining a sufficient number to constitute a branch, the result of their efforts to be reported to a subsequent meeting.

Mr. W. FOTHERGILL presided, and referred to the isolation that had prevailed formerly. He rejoiced at the altered condition of things manifested by such meetings as that which had just been held, and warmly exhorted the younger members of the profession to make good use of the many advantages offered by the Association. He promised to render all the assistance in his power to the scheme now proposed.

During the meeting the following gentlemen were elected members of the British Dental Association:—William Mapplebeck, Liverpool; W. J. Pidgeon, Bootle, Liverpool; F. W. Minshall, Salford.

To the Midland Branch:—Thomas Headridge, Leeds; J. G. Birch, Leeds; G. O. Whittaker, Manchester; F. M. Taylor, Liverpool; W. Mapplebeck, Liverpool.

The Benevolent Fund.

THE following new Subscriptions and Donations to the Benevolent Fund of the British Dental Association, have been promised since August 1st, 1888, including those given at the Dublin Meeting. Those marked * have been paid.

	Subscriptions.
*Baker, Dr. A. W. W., 18, Lower Fitzwilliam St., Dublin	£1 1 0
*Barry, Rt. Hon. Lord Justice, 3, Fitzwilliam Sq., Dublin	1 0 0
Clarke, John C., 32, Arthur Street, Belfast...	1 1 0
*Corbet, J. J. F., 5, Cavendish Place, W. ...	5 5 0
Cunningham, C. M., 10, Westland Row, Dublin ...	0 10 6
*Houghton, Edwin, 29, Stockport Road, Manchester ...	0 10 6
*Murray, G. M. P., 10, Hume Street, Dublin ...	1 1 0
*Petherbridge, J., 6, Shore Terrace, Dundee ...	1 1 0
*Richards, F. W., 33, Paradise Street, Birmingham ...	0 10 6
*Woodruff, W. H., 13, New Burlington Street, W. ...	3 3 0
	Donations.
*Anonymous ...	1 1 0
*Ditto ...	1 0 0
*Ditto ...	1 0 0
*Ditto ...	0 10 0
*Ditto ...	0 10 0
*Ash, Claudius & Son, Broad Street, Golden Square (<i>in addition to subscription</i>) ...	5 0 0
*Baker, Dr. A. W. W., 18, Lower Fitzwilliam Street, Dublin (<i>in addition to subscription</i>) ...	1 0 0
*Biggs, John A., 46, St. George's Road, Glasgow (<i>in addition to subscription</i>) ...	0 10 6
*Cooper, C. H., 12, North Parade, Bradford ...	0 10 6
*Corbett, Daniel, 12, Clare Street, Dublin...	10 0 0
*Cruise, Dr. F. R., 93, Merrion Square West, Dublin ...	1 0 0
*Kirby, A., 8, Harpur Place, Bedford ...	1 0 0
*Kluht, H. J., 44, Norfolk Terrace, Westbourne Grove (<i>in addition to subscription</i>) ...	1 1 0
*Martin, Gavin, 5, Manningham Lane, Bradford...	0 10 0
*Smale, Morton, 89, Seymour Street, Hyde Park, W. (<i>in addition to subscription</i>) ...	5 5 0
*Stirling, John, 23, Wellington Square, Ayr ...	0 10 6
*Tait, Thomas A., Ovenden House, Tenderden, Kent (<i>in addition to subscription</i>) ...	0 10 6
*Walker, Dr. Joseph, 22, Grosvenor Street, W. (<i>in addition to subscription</i>) ...	10 10 0
*West, Charles, 19, Finsbury Square, E.C. (<i>in addition to subscription</i>) ...	1 1 0
*White, T. Charters, 32, Belgrave Road, S.W. (<i>in addition to subscription</i>) ...	1 1 0

Should any of the gentlemen whose names appear opposite their contributions have wished to remain anonymous, the Treasurer hopes that they will forgive him for not carrying out their wishes, as he has only had definite information in those cases which are stated as anonymous.

ORIGINAL COMMUNICATIONS.

Implantation of Teeth.*

BY GEORGE CUNNINGHAM, B.A., D.M.D., L.D.S.

Definition.—By implantation is meant the drilling of artificial sockets in the maxillary bones and the insertion therein of natural teeth of suitable size and form. This operation which is essentially one of “yesterday,” is often described as nothing new simply from failure to differentiate it from the cognate operations of replantation and transplantation.

Replantation consists in the replacement of a tooth which has been extracted or dislocated in the alveolar socket of the same patient, while by transplantation is meant the extraction of a tooth from the alveolar socket of one person and its replacement by a similar tooth extracted from another. The conditions and circumstances under which these two operations are undertaken differ in some very important details from the operation of implantation. “In replantation, as this operation is usually performed, the parts, that is the pericemental membrane, the apex of the root and the alveolar process immediately surrounding these, are highly inflamed, in a state of disease with pus either already formed or forming at the end of the root, and the operation is undertaken with a view to relieving or aborting an alveolar abscess. The portion of the diseased apex is then cut off and the tooth is forced back into the cavity. Here we have a diseased root thrust back into a diseased socket. . . . In transplantation there is a healthy tooth, but it is usually made to take the place of a miserably old diseased root that has been growling and festering in a diseased socket for years. The diseased root is pulled out, but is the disease in the surrounding alveolus ex-

* Read at the Annual Meeting of the British Dental Association, held in Dublin in August, 1888.

tracted with it? . . . In implantation we have a healthy root in a healthy socket, and therefore the factors that tend to the destruction of the root in replantation and transplantation are not present and therefore not operative in implantation."

Dr. Weld in the chapter he contributes on Replantation and Transplantation of the Teeth to the "American System of Dental Surgery," points out that this argument, however, hardly holds good as to those replantations after the attachment of artificial crowns cited in his paper, in nearly all of which cases both roots and sockets were healthy, while ultimate failure was the result of all.

Without endorsing Dr. Younger's contention that the factors which tend to the destruction of the root in replantation and transplantation are necessarily absent in implantation, we must admit that the conditions and the circumstances are not identical, and that the new operation merits careful and scientific investigation at our hands.

History.—In the "American System of Dental Surgery," you will read that Dr. Younger first performed this operation in 1881. This is far from being correct; the operation referred to was simply one of transplantation. Dr. Younger's own account is as follows:—"My former practice (in transplantation), when I found a root was too long or too wide for a socket, was to cut off the apical extremity or shave off from the surface of the root the necessary quantity to insure a fit: but so often the best portion of the pericementum was in that way removed, that I tried deepening or widening the cavity, as the case required, often cutting freely into the bone in order to save all possible of this valuable tissue. I found that adhesion took place in this portion as perfectly as in the unbroached. The consideration of this led me to the grand conclusion, that *artificial sockets could be drilled into the bone itself and teeth planted therein as successfully as into the natural cavities.*

"My first operation of this nature was reported to the California State Dental Association, in August last (1885), and its success was witnessed by them several weeks after its performance. On June 17th, 1885, Miss Ward, a young lady of twenty-four, presented herself. She had lost the left superior lateral incisor, root and all, four years previously and had been wearing, as a substitute, an artificial tooth on a rubber plate. The collapse of the gum, consequent on the absorption of the alveolus was so great and the

exposure of the gum so much, in conversation and especially in smiling, that the falsity of the denture was immediately recognized and was an object of great distress to her. As it was impossible, for the reasons just given, to produce an artificial substitute that would look natural, I determined on the following operation, one that I had for a long time contemplated and which, though satisfied in my mind, in consequence of certain observations and experiments, would be successful, seemed so opposed to scientific thought and the established rules of surgery, that I had not before screwed up my courage sufficiently to attempt it. I took a corresponding lateral from a young man, which, from its awkward position was disfiguring his mouth, and prepared it as I do all teeth I use in transplantation, viz., removed the pulp, filled the pulp-chamber and root-canal with Hill's stopping, and finished the apex with gold. The tooth was then placed in water of the temperature 100° to 110° Fahrenheit, to cleanse it of all blood and impurities, and allowed to remain for about one hour. It was then placed in a bath of bi-chloride of mercury, 2 parts to 1,000 water, for about fifteen minutes, to disinfect it. The tooth being now ready, I turned my attention to the patient. I cut a hole in the gum a little less than the diameter of the root to be inserted. I then took an ordinary flat, angular-edged drill, and drilled into the bone in the line of direction the tooth was to occupy. When fully deep enough, I widened the cavity and formed the socket with a cone-shaped burr. When I found by the trial that the cavity would receive the tooth perfectly, I carefully washed and sponged it out, in order to remove every particle of detached bone, first with warm water, then with cold, and lastly with the bi-chloride solution already referred to, and when the bleeding had ceased I introduced the tooth and kept it in position by delicate silk ligatures attached to the central incisor on the right and to the canine on the left. There resulted a little swelling over the root, which remained a few days and then gradually disappeared.

"An accident to the gum occurred during the development of the socket. Just as the drill touched the surface of the bone, the young lady jerked her head back, which caused the instrument to slip forward and through the gum, making a triangular-shaped gash of fully an eighth of an inch in length. Before the tooth was inserted the edges of this cut were brought carefully together and retained in contact by delicate silk sutures. On the fourth day the sutures were removed, and no mark was apparent to tell of

the lesion that had existed. In twelve days I removed the ligatures from the tooth and found it well attached. I then removed the threads to fix the tooth while the callus formed round the root. About three weeks afterwards, the gum being free from every sign of irritation and the tooth comparatively firm, and desiring to improve the position of the right superior central and lateral, I had to pass the ligatures around the new tooth. This, unfortunately, set up a slight inflammatory action, and an epulis formed a few days after, and a little discharge of matter took place. I thereupon moved the ligatures and treated with injections of iodine. When last seen the epulis had nearly disappeared, the surrounding gum had resumed its normal look, the tooth became firm in its position, and was performing its functions in common with its fellow teeth as though it had never been a stranger in the mouth.

"This case was examined by several physicians, and by the members of the California State Dental Association, who, with the exception of two, pronounced the operation a great success. These two gentlemen were not thoroughly satisfied with its stability because only of the epulis that had formed."

On the 15th August and 5th September, 1885, he operated for his second patient, aged thirty-five. In this case the superior bicuspid had been lost about twenty years during which time she had worn artificial dentures. The lady expressed herself with regard to the operation as follows: "'When I think that for twenty long years I have had to wear a nasty old plate, and now I have instead natural teeth growing in my mouth, I feel so happy that I cannot express myself.'"

The first accounts of Dr. Younger's method of implantation contained more or less facetious allusions to his keeping a stock of live teeth in the combs of innumerable roosters. The incredulous if not the absolutely scoffing journalist thereupon treated the affair as a huge joke, and drew vivid pictures of the Californian Cocks' Comb Tooth Supply Association, Limited. From Dr. Younger's own publication, the fowl facts seem to be as follows:—In his endeavour to prove that the operation of transplantation could be made a success, he determined to repeat the experiment of John Hunter who, to test the vitality of the pericementum, planted a tooth in a cock's comb, with this difference, that he took the precaution of removing the pulp and filling the pulp chamber and root canal with gutta percha (Hill's

stopping). To prevent any trouble from decomposition of the pulp, the tooth was well cleansed in warm water and dipped into a disinfecting solution. The success of the experiment satisfied him that the "pericementum would attach itself to any vascular body, and that if properly planted in a fresh socket it would attach itself and form a living union with the surrounding tissues. The great and only difficulty I had to contend with was the procurement of teeth at the time they were needed. At last a way suggested itself. I applied to my dental friends for whatever good teeth or roots the exigences of cases required them to extract. The experiment of Hunter and my own experience had taught me that teeth could be kept alive indefinitely in cocks' combs. But could they be transferred to the human mouth again and made to grow there? I concluded they could, and my first experiment verified my conclusion. On November 28th, 1882, a bicuspid that had been in a cock's comb for ten days was transferred to the mouth of a gentleman, where it fastened itself as if there had been no gallinaceous period in its existence."

Dr. Younger, in his first paper, gives an account of his first seven cases of implantation, but no mention whatever is made of the teeth having passed through an intermediate stage in the comb of the cock. Where the history of the scion tooth is given at all it appears to have been out of the mouth only a few hours, and sometimes only the time necessary for its adequate preparation.

In July, 1886, Dr. Younger read his second paper on "Implantation of Teeth and Pericemental Life," before the California State Dental Association. In it he announces that since the publication of his first paper on "Transplantation of Teeth into Natural and Artificial Sockets," he had made some discoveries which had perhaps best be described in his own words, and more especially so since the original communications are inaccessible to most readers on this side of the Atlantic.

"I have made a discovery in regard to the vitality of the pericementum, that is even more startling than the success of the operation of implantation itself. In the pamphlet I recommended the use of cocks' combs as a means of preserving the vitality of the peridental membrane, and also mentioned that in two instances the life of this membrane had been preserved for over fifty hours in tepid water. I now, however, have to report a case—one of several—which proves that these means are not at all

necessary to preserve the vitality of this, the most wonderful tissue in the human body, that this vitality of the pericementum is marvellous, and that it may be as tenacious as that inherent in the seeds of plants.

"In the early part of March, 1886, Mrs. Dr. H. G. Blankman, the wife of one of the pioneer dentists of this coast, brought me a bicuspid that had been extracted at her solicitation, in Sacramento, on the 31st day of January, 1885, in the belief that it was the seat of a neuralgic pain which had been the cause of great anguish to her. This tooth, brought to me after this long lapse of time, had in the meanwhile been carried about in her portemonnaie, stowed away in her jewel case and shuffled about in her bureau drawer. And this tooth she wanted replanted in her jaw! My first impulse was to laugh, my next to argue with her about the impossibility of success of such an operation, explaining to her that it was due only to the vitality of the membrane covering the root that the operation owed its success; that, without this living membrane, the tooth was as impossible of attachment as so much bare ivory or porcelain, and that while I had succeeded in keeping this membrane alive for over two days, it was by constant immersion in warm water at a blood temperature; but that the pericementum of this tooth was, as she herself could see, as dry and shrivelled as parchment, and as devoid of life.

"Just as I had persuaded her of the impossibility of success, there flashed through my mind a passage in John Bell's work on the 'Anatomy and Physiology of the Human Body,' that I had lately read, which awoke the suggestion that success in implanting that tooth was, after all, possible.

"This eminent surgeon, in criticising an article by the famous John Hunter, says:—'How can such vitality exist independently of a circulation? But there are not wanting examples of an obscure and low degree of life existing in animals' ova, or seeds, for seasons without circulation; and if for seasons, why not for a term of life?'

"While this passage did not bear directly on the subject in question, it somehow awoke a train of thought that led me to the conclusion that in that dry, shrivelled membrane, there possibly lay lurking a dormant life, which under favourable conditions would rouse its energies and make the tooth enclosed once more a living, useful organ.

"I had proved that the peridental membrane possessed a won-

derful tenacity of life in at least two instances, where, after it had been removed from all life-giving connection for fifty-two hours, it was as vigorous in forming attachments as though it had been planted immediately after removal. I therefore reasoned with myself, if this peridental membrane preserves a vitality unimpaired for fifty-two hours, why not for so many weeks or months? So I said, 'Mrs. Blankman, the idea has just occurred to me that what you want done is, perhaps, possible.' And I explained the cause of this revolution of opinion, as she is not only a brave but a very intelligent woman, and continuing, said :—'I will perform this operation as an experiment, to test the vitality of the pericementum ; for, though I have no positive expectation, I have a hope of success.' So on the 11th of last March, in the presence of, and with the assistance of Dr. Alexander Warner, who was acquainted with all the circumstances of the case, I drilled a socket between the first left superior bicuspid and first molar, and after soaking the tooth in water—temperature 120° Fahr.—for twenty-five minutes, to soften the membrane, restored to the jaw that which it had been deprived of just thirteen months and eleven days before.

"As the distal aspect of the tooth was perfect, and the approximal not, I turned the tooth, thereby much improving the original appearance of that portion of the mouth. When the operation was finished, the tooth was found so firmly fixed in the socket that retaining ligatures were not applied, and union took place as rapidly and as thoroughly as if it had been a fresh tooth.

"The tooth retaining this firmness, and no swelling nor pain ensuing, the lady commenced eating with it, and at the end of twelve days became so careless in her use of the tooth, that she bit a hard crust of French bread with it. This was too much ; the tooth received a wrench which loosened it and caused the gum to bleed profusely. Next morning she hurried to the office, and with tears in her eyes, narrated the accident. I found the tooth quite loose but not dropping, and the gum on the palatine surface swollen and with the evidence of having bled at the margin.

"In my heart I was glad the accident had happened, for to me it was a test of the question whether the retention of the tooth was due simply to the nice adaptation of the walls of the socket to the root of the tooth, and therefore only mechanical, or whether it was really due to awakened life in the peridental membrane, and consequent vital connection with the living environment of gum and alveolar substance.

"If mechanical, I argued, the irritation that has been set up around it, especially in its present loose condition, will cause its expulsion ; but if vital, it will be retained and become firm again. I therefore did not seek to retain it in place by any ligature, but simply painted the gum with tincture of iodine, and cautioned her not to chew on that side until I gave her permission. In one week all marks of the accident had passed away, the tooth became again firmly fixed, and remains to the present moment as solid as a rock. I have tried, since then, to pass a delicate instrument, the point of which had been flattened for the purpose, between the gum and the tooth, but the act gave as much pain, and the instrument met with as much resistance, as in the tissues surrounding the teeth that had never been disturbed in their sockets ; all of which clearly proves that the pericementum of that tooth, dry and shrivelled as it was, had during those long months of absence from any life-supporting substance, tossed about from place to place, from pocket and purse to casket and drawer, preserved a vitality as fresh and vigorous as when it was removed from the place in which it grew.

"I am happy to say, that Mrs. Blankman has kindly consented, in the interest of science, to present herself to you this afternoon in order that you may examine this tooth and satisfy yourselves by personal and thorough examination, as to the success of the operation. And I want each and every one of you gentlemen to test in every way that your ingenuity may suggest, short of extraction, the statement I have made, that vital connection has been established between the tooth and the walls of the socket, as perfect as that of the other teeth that have grown there and never been tampered with. I have since tried implanting teeth which have been extracted for weeks and months, with equal success, proving the wonderful tenacity of life of the peridental membrane.

"The question now to my mind is :—'When does the pericementum die?'

"In consequence of these experiments, and the equal success of implantation of long-extracted teeth with that of fresh ones, I have discarded, as unnecessary, the warm water and the comb of the troublesome cock. I now simply lay the teeth aside in a clean, cool, dry place, and prepare and use them as I want them."

As is not unusual when a new operation is brought prominently into notice, a certain number of claimants arise to assert their rights to priority as discoverers of the same. Thus it is said that

implantation was first practised by Dr. Mitscherlich of Germany. As far as I can gather from his monograph, he transplanted teeth from the corpse and even inserted specially prepared artificial teeth into recently vacated sockets. No mention whatever occurs of any artificial socket having been made. The term implantation is frequently used in this as well as in papers by other authors, but always as synonymous with replantation or transplantation. Herr Witzel and Professor Sauer are also accredited with having performed the operation of implantation prior to August 1881, and with having reported the same at the meeting of the Central Association of Dentists in Germany. Dr. Bing of Paris and Dr. Parmlly Brown also claim to have performed the operation of implantation some twelve or more years ago.

However that may be, it is certain that to Dr. Younger alone belongs the entire and sole credit of bringing the operation forward in such a way and with such enthusiasm, that it has quickly resulted in its being included in the category of practical dental operations.

(*To be continued.*)

On Failures.*

BY J. DENNANT, L.D.S.ENG.

IN these days of Associations of men having a community of interest no one will, I fancy, call in question the value of meeting together, as we do to-night, to know one another and to extract from the pleasant contact of mind with mind, fresh thoughts and practical hints that shall reinforce our store of knowledge, the better to enable us to grapple with the difficulties of our speciality.

As an anxious official of this Association, I often wonder how we can turn these pleasant meetings to the best practical account. We all acknowledge the value of *novel cases* presented, and the interest of a striking *abnormality*; but it seems to me that it would be most useful if we got into the habit of confessing our *failures*. If we have discovered them and our correction of them, so much the better; but if we have simply discovered a failure in a particular mode of working, or of formula in treatment, without evolving its correction, why not refer to it here?

We should probably find we were not alone; many others, if they

* Read at the meeting of the Southern Counties Branch, held at Hastings on September 22nd.

were candid enough, could possibly confess to the same misfortune, and in the rivalry of friendly counsel there would probably be found the solution of the difficulty or the suggestion of an improved method.

Doubtless the value of such confessions will lay in the reliable data for our facts; there should be the habit of recording all cases where new modes or remedies are tried. If exact methods of working were generally adopted, the comparing of results would be tolerably easy, and there would be a definite gain to those taking part in the salutary process.

The word *failure* covers a wide field amongst candid men, for what department of our work is exempt?

There are some men who write and speak, who give us the impression that they never fail in anything; but catch them in quiet moments, when little confidences begin to ooze out between man and man, and you will find them confessing that they have made mistakes out of which they have really achieved their present standard of excellence.

And here I would suggest that these friendly and informal meetings should frequently be the occasion of mutual confidences and confessions of failure. Here, at any rate, we may speak with the feeling that there are no reporters present.

What an instructive lesson it would be if our specialists in bar and bridge work would confess their failures! I do not refer, of course, to the empirical constructors of bridge work, but to honest workers among us laudably seizing upon novelties with a view of accomplishing the best results for their patients.

At present I confess that, notwithstanding the glowing accounts which we have received of this method, I have to a great extent remained an unbeliever.

I do not like this *mauvais pas* arrangement in the mouth; those of us who have crossed over that icy tongue, the *mer de glace*, and scrambled among its enormous papillæ, will remember the gratitude and admiration we felt for that excellent bar and bridge work on the other side, in the form of an iron railing fixed in the face of the precipitous alveolar sides of that rocky mountain, to which we clung with implicit faith, as we looked with terror into the depths below, upon that mass of *debris*, tartar-like, covering over the sublingual duct, which was steadily at work underneath.

One little failure of that piece of bar work, and we should have been dashed to pieces; but it was a true friend, and led us to the safe path. I never think of that arrangement without gratitude.

But with the mouth it is different. The teeth, poor creatures, are sentient things, with their aches and pains, and have a way of asserting themselves when they suffer. A tooth, after a period of agony, if it has received no attention, will lift its head above its fellows, as much as to say, "Here I am in terrible trouble, won't you do something for me?"

The constructor of bar and bridge work however, is relentless, and admits of no individuality in the teeth, but pegs them down, prisoners behind bars, regardless of consequences.

I would not, however, scoff at the talent and ability displayed in much of this work, notably in such specimens as were exhibited by Mr. Claude Rogers at our Dublin meeting. I yield to no one in admiration of such perfect workmanship. And here I would remark upon the advance made in this form of denture by Mr. Gartrell, as shown by him at that meeting. He has overcome one objection to this class of work, its fixity and the difficulty of keeping it perfectly clean in the mouth, in a most ingenious manner.

A flat gold bar alone is the one fixture between the teeth, and the denture is made with a slot in the solid gold work behind the teeth, exactly to fit and slide over the bar, so that the wearer can at will remove it for cleansing purposes. Mr. Gartrell showed a most admirable specimen in his own mouth, and it will be of signal interest to the profession if he will keep us informed as to its future history.

In this connection, I cannot help thinking what demands will be made on the dentist of the immediate future, both as to skill and patience; and to our young men and students I would say, woe to him who neglects the mechanical side of his education. They should make themselves experts at the bench (especially of the modern use of the blow-pipe), even if it takes them a longer period in preliminary education.

Another interesting topic on failures, would be automatic mallets and electric motors. Such a discussion would be doubly interesting and amusing, if inventors, manufacturers and dental depôts would take part in a candid confession.

It is a well known fact that many good operators have tried these various appliances, and have gone back to hand malleting for their hard foil fillings, and have discarded the electric motor as being too uncertain and troublesome; and yet in the demonstrating room at Dublin I saw most excellent work done by the

electric automatic process by operators whose modifications have enabled them to satisfy themselves as skilful and humane workers. I hope we have something more to hear from them on this interesting subject.

But there is another subject of failure that more nearly touches us all (for it is more common than we sometimes think), and it is a failure that so frequently passes under another eye, unfortunately, rather than our own. I refer to irritation and sometimes disorganisation of the pulp supervening shortly after the filling of a tooth. How frequently it happens that patients postpone their visits to us until they are on the point of leaving home for a holiday, or long absence. The time left for the treatment of an unhealthy tooth is so often limited, that we temporize with the case by doing the best we can under the circumstances, which implies that we have by no means done the best that could have been done for the tooth. The patient is cautioned probably by a prudent operator to return to him in three months for further examination, but in a few days possibly pain drives him to another practitioner for relief; and here let me say there is room for that "Charity which thinketh no evil," and for the golden rule of doing unto others as we would they should do unto us.

One element of failure in these cases, I am inclined to think, may be that admirably adapted instrument for the purpose, the spoon-shaped excavator. Its superiority over the square edge, for painless working, goes without saying. How wonderfully and dangerously near to the pulp you may cut without pain in some cases; and I think it is possible to wound the pulp microscopically, so to speak, without knowledge of the fact and notwithstanding the intercepting medium between the floor of the cavity and the stopping, mischief ensues; and the *particular risk* in these cases is that we fail, after the preparation of the cavity, to explore for the minutest exposure of the pulp. Perhaps you say, such a mistake as this ought not to happen; true, but it will occasionally happen, and I am free to confess that it has occurred in my own practice.

Are we not exposed to the temptation to hurry in our work? A long list of appointments with occasional interlopers drive us along, and when the patient tends the fee (as they will *occasionally* do at the time) do not some of us feel twinges of conscience at times as to the proper fulfilment of duty? As honest men, we should square our conscience in this matter of services rendered.

The process may involve a reduction of the number of patients seen, and a readjustment in many cases of the fees charged, but it should be done nevertheless. And if a general consensus of opinion happily pointed to such a regulation of the moralities of our position, how soon would our patients become educated to the fact that *skill, experience and time*, on the part of the operator, must be met with its equivalent remuneration.

In the treatment of a tooth, a dead nerve is often difficult to extirpate completely when there is an awkward curvature of root, and here is a cause of failure, in the possible decomposition of the remaining portion, with all the sequelæ attending it. With the great variety of antiseptics now claiming our attention, it is sometimes difficult to make the selection.

Iodoform in spite of its disagreeable odour is a valuable agent in such cases, but it is not always easy to bring a sufficient quantity in contact in a nerve cavity. A valuable suggestion has been made by Mr. Denison Pedley, in a paper read to the Students' Society of the National Dental Hospital, and published in the July number of the *Dental Record*, which you will find worthy of your attention. He suggests in such cases that the nerve canals should not be permanently filled; but that a dressing permanently antiseptic and capable of easy removal, should be carried by wisps of cotton into the pulp chamber and roots where possible, and that over this a disc of card or metal should be placed, and the tooth then filled in the usual way. The dressing is an iodoform paste, and the formula he gives is as follows:—

Ol. eucalipti	...	...	...	2 parts
Ol. caryoph	...	...	...	3 "
Creosotum	...	...	...	10 "

Into this, gum mastic should be dissolved to saturation. After filtering through cotton wool, the solution should be thoroughly incorporated with iodoform in a Wedgewood mortar until it becomes almost a solid mass. The oil keeps the preparation moist. Creosote, to a certain extent, disguises the smell of the iodoform. The gum holds it well together, and one is enabled to introduce about twice the quantity as when dry. This preparation (he says) he has been using for between three and four years, and it undergoes no change in or out of the mouth.

I have only used it quite recently in not more than a dozen cases, but I must say with great satisfaction, and as it is some trouble to make, and at the same time of sufficient value to have

concurrent testimony about, I have brought with me some samples for distribution in order that you may without trouble test it in practice and express your opinion upon it. I would warn you that like all preparations of iodoform it requires very carefully sealing up in the cavity.

While on this subject I ought to call your attention to what is called by its manufacturer, a German chemist (Trommsdorff), "an odourless substitute for iodoform," which has just been introduced to the profession under the name of sozoidol and is a compound of substances known to be powerful antiseptic, viz., iodine (52-54 %), carbolic acid (20 %), and sulphur (7 %). It is most conveniently used in the form of salts. *Sodium-sozoidol* and *potassium-sozoidol*, the former being readily soluble in water or glycerine and the latter only soluble to a slight extent, being generally preferable as a dusting powder. The maker claims for it great virtue as a root filler in the form of one part sodium-sozoidol and two parts potassium-sozoidol made into a paste by means of pure glycerine. He says the soluble sodium salt will gradually go through the apex of the root, while the potassium-salt remains behind, thereby in nearly every case preventing periostitis. It is further stated that "the sozoidol preparations exercise a very favourable curative effect on pulp laid bare by excavation." We can only hope that this favourable account of it may prove true.

Did time permit, I might multiply instances of failure which will readily occur to your minds ; but the future is before us, and if I have tapped a vein that will with your assistance yield a good supply of practical and instructive discussion at these informal meetings, I shall, I hope, have your indulgence for presenting this fragmentary paper, on the happy occasion of our first visit to Hastings.

The communications and papers were freely discussed, and a vote of thanks to the chair terminated the meeting.

APPOINTMENT.

MR. E. C. FISK, L.D.S., has been appointed House Surgeon to the National Dental Hospital, *vice* F. Lankester resigned.

On the Relation of the Nervous System to certain Oral and Dental Defects.*

By BERTRAM C. A. WINDLE, M.A., M.D. (Dub.).

PROFESSOR OF ANATOMY IN THE QUEEN'S COLLEGE, BIRMINGHAM, AND
HON. MEMBER MIDLAND COUNTIES BRANCH BRITISH DENTAL ASSOCIATION.

MR. CHAIRMAN AND GENTLEMEN,—So far as I can gather from the literature of the subject which I have consulted, I do not think that sufficient stress has been laid upon the action of the nervous system in the production of certain of the defects, chiefly congenital, met with in the cavity of the mouth.

Mr. Oakley Coles† has, it is true, discussed briefly the question of the connection between cleft palate and nervous lesions, but the subject is capable, I think, of further expansion.

The theory of the *trophic* influence of certain nerves, or parts of nerves is one which has been gaining ground for some years, and may now be said to be fairly well established.

Dealing with the trophic action of the trigeminus or fifth nerve, the nerve with which we are concerned in the region at present under enquiry, Stirling‡ says, after describing the nutritive changes caused in the eye by section of the ophthalmic division, or of that part of it which is supposed to contain the trophic fibres—"There are three conditions on which the changes may depend: (1) mere loss of sensibility, which alone is not sufficient to explain the phenomena; (2) on vaso-motor disturbance, which is excluded by certain facts detailed, and also by the consideration that, if the fifth nerve be divided and the superior cervical ganglion excised simultaneously, ophthalmia does not occur, and in fact, excision of this sympathetic ganglion may modify the results of section of the fifth (Sinitzin). Thus we are forced to (3) the theory of trophic fibres, whose centre is the Gasserian ganglion." And again (p. 803): "The trophic disturbances which sometimes accompany affections of the trigeminus are particularly interesting. They are: a brittle character of the *hair*, which frequently becomes grey, or may fall out; circumscribed areas of *inflammation of the skin*, and the appearance of a vesicular eruption upon

* Read at the annual meeting of the Central Counties Branch at Malvern, on October 25th.

† "Deformities of the Mouth," p. 30.

‡ "Text Book of Human Physiology," vol. ii., p. 795-6.

the face (often following the distribution of certain nerves), and constituting *herpes*, which may also occur on the cornea, constituting the neuralgic *herpes corneæ* of Schmidt-Rimpler. Lastly, there is the progressive atrophy of the face which is usually confined to one side, but may occur on both sides (Eulenburg, Flasher). It is caused very probably by atrophic affection of the trigeminus, although the vaso-motor nerves may also be affected reflexly." The classic case of Otto Schwann is a good instance of the lesions following upon injury of the trophic fibres of the trigeminus. I saw him when Professor Purser exhibited him to his class in the University of Dublin, and made a note of his case, part of which I reproduce for the benefit of any unfamiliar with it. At the age of ten, atrophy of the left side of his face commenced, and at forty-one, when I saw him, the following was his condition: the muscles, bones, &c., of the left side of the face were much smaller, and all the subcutaneous fat had quite disappeared, the hair, with the exception of a very small moustache, did not grow upon it. The left orbit was much larger and the eye deeply sunken from disappearance of the post-ocular fat. Atrophy did not extend beyond the vertex. The median line of the face was crescentic, with the concavity directed to the left, from the shrinking of that side. The left side was slightly hyperæsthetic. The left side of the tongue was atrophied and the sight of the left eye impaired, though not from atrophy of the optic nerve. The sense of smell and discharge of mucus were both less on the left side than the right. All these changes were probably caused by some lesion of the trophic fibres of the trigeminus. Our knowledge of the influence of the nervous system of the foetus upon its development is very small, too small, indeed, for any very definite or secure theories to be founded upon it, but the following facts may be cited in this connection which seem at least to be tolerably certain.

Firstly, irritation due to one cause or another may produce spasmodic contractions of certain muscles, thus causing definite deformities such as talipes. Secondly, and this is more to the point, as Otto first pointed out, there is a relation between absence of nerves and fatty degeneration, parasitic foetuses, for example, being generally devoid of nerves and possessing much adipose tissue replacing other and more important structures.

Of this influence of impaired nerve conduction or development Professor Bland Sutton* gives the following example:—"A woman

* "Introduction to General Pathology," p. 85.

in the fifth month of gestation fell down stairs upon her abdomen. At the eighth month she was delivered of a child, the upper part of the body presenting the proportions of a foetus of corresponding date, but all parts below the navel agreed with those of an embryo at the fifth month of intra-uterine life. Dissection showed that the spinal column ended at the first lumbar vertebra, the remaining lumbar, sacral and coccygeal elements being absent. The skin of the legs was exceedingly thin, and on reflecting it, the bones were found to be thin, and to present the characters of those of an embryo at the fifth month. All the other tissues of the legs, muscles, nerves, ligaments, &c., were represented by adipose tissue. In this instance it is probable that when the mother fell she fractured the spine of the foetus; the result was to cut off nervous influences from the legs, which in consequence retrograded into fat." It is not, I think, straining the facts too far, to draw the inference that some at least amongst the congenital malformations of the foetus may be due to want of action, or to irregular or vicious action of trophic fibres or fibres closely allied to them, in the nerves, or to the cells from which they emanate.

In this case lesions about the face and its cavities would be due to such action on the part of the trigeminus (fifth nerve), and would include ophthalmic defects, and facial clefts as well as the oral malformations with which this paper deals. Such a theory is supported (1) by Anstie's* statement that "the nervous centre in which the trigeminus is implanted is, of all nervous centres, the one which in the human subject is most liable to congenital imperfection of the kind which necessitates a break-down in its governing functions at special crises in the development of the organism," when taken in conjunction with the fact that malformations within the domain of this nerve are quite common as malformations go. And (2) by the fact that several malformations by arrest of different organs or parts within the same domain may not unfrequently co-exist in the same foetus.

It now remains to deal briefly with the defects of the oral region:—

Cleft Palate and Hare Lip.—As Oakley Coles† has pointed out, Tiedemann‡ and Leuckart§ alluded many years ago to the relation-

* *Lancet*, 1866, i. p. 654.

† Loc. cit. ‡ *Ztsch. für Phys.* Bd. i. p. 71.

§ *Untersuch. über den Zwischen Kieferknochen des Menschen.*

ship between cleft palate and imperfect development of the nervous system. Dr. Langdon Down* has drawn attention to the occurrence of palatine abnormalities in congenital idiots. Out of 200 cases observed 82 "possessed palates inordinately arched, and with this increased arching were noticed various abnormalities." "In seven the palate bones did not meet, leaving a sulcus between them, the mucous membrane being however continuous. There was no instance of the ordinary cleft palate, and I may remark that in an examination of nearly 600 idiots, I have failed in meeting with an example of that deformity. In several the hard palate extended but a short distance posteriorly from defect of the palatal process of the superior maxillary bone and entire absence of the palatal process of the palate bone, and in all these cases the velum palati was unusually flaccid. In the majority of cases there was marked narrowness of the palate." All these cases as well as the ordinary cases of cleft palate and hare lip could be accounted for on the nervous hypothesis by a failure of the nerve influence leading to faulty or incomplete union of the two halves of the palate in the process of development.

V-Shaped Maxilla.—This again in its most marked form, the lambdoid jaw of Oakley Coles, is as he says, "rarely seen except in connection with low mental development, and especially where the idiot is microcephalic." I am not aware whether the less marked forms of which one sees casts in dental collections are associated with small mental development, but the question is one which could be authoritatively settled by experienced dentists.

Callender† has pointed out that certain abnormalities of the incisive repair may depend upon arrested or stunted growth of the incisive process of the superior maxilla. This process may in fact be looked upon as the governor or regulator of the intermaxillary bones. Where its growth is rapid and stunted there will be compression of the intermaxillæ, with the formation of a small incisive region, leading to overcrowding, displacement and possibly abortion of some of the teeth. Where, on the other hand, we get arrest of the development of the incisive process, as typically in double cleft palate of the alveolar form, there is also great projection of the intermaxillæ, as indeed is well seen in the class of cases just alluded to. A lesser amount of

* "Mental Affections of Childhood and Youth," p. 159.

† "As the so-called serpent teeth." S. Bart.'s Hosp. Reports, vol. vii. p. 149.

similar arrest of development would lead to a more moderate protrusion of the upper incisors, forming the so-called "buck teeth." This stunting or arrest may, as I think, again very probably depend upon faulty nerve influence. Here, again, Dr. Langdon Down's observations are of great interest. Speaking of the teeth in congenital imbeciles he says (p. 161): "In a large number of cases they are developed irregularly, are crowded, and the canine occupy a different plane from the other teeth, all these irregularities resulting from the imperfect development of the superior maxillary bone. In six cases, or three per cent., the upper incisors projected to such an extreme degree as to produce grave deformity. In seven cases the teeth of the lower jaw were in advance of those of the upper."

I have thought that I might be permitted to lay these few points before a meeting of the dental practitioners, because in their hands lies the possibility of collecting facts which may solve or assist to solve some of these difficult questions associated with the genesis of oral deformities.

REPORTS OF SOCIETIES AND OTHER MEETINGS.

Odontological Society of Great Britain.

THE ordinary meeting of the Odontological Society of Great Britain was held on Monday, November 5th, Mr. Howard Mumery, M.R.C.S., L.D.S., Vice-President, in the chair. There was a full attendance of members and several visitors were present.

Mr. Felix Weiss (Librarian), having announced the addition of some pamphlets to the Society's library, Mr. Edward A. White, M.D.Ed., M.C., L.S.A., L.D.S.Ed., of 1, Highbury Place, was elected a resident, and Mr. C. F. Ives, M.D.S.N.Y., of New York, was elected a non-resident, member.

Mr. STORER BENNETT drew attention to the value of nerve devitalising fibres prepared by the S.S. White Manufacturing Company, and recently spoken of in the *Dental Cosmos*. The compound was one of tannin, opium, arsenic and creosote. Several members who had also employed the preparation corroborated Mr. Storer Bennett's favourable experience.

Mr. BOYD WALLIS showed an example of the eruption of a wisdom tooth between the ages of fourteen and fifteen years. The jaw

was fully developed. The patient had menstruated since her tenth year. Also a model of the mouth of a gentleman aged forty, showing absence of lateral incisors in the upper jaw; six centrals had been erupted but one had been lost. He also showed an electric battery with a new arrangement of switch board.

Mr. WALTER COFFIN exhibited an autograph letter written by General Washington to his dentist, Dr. Greenwood, expressing the General's thanks for skilled and successful treatment.

Mr. F. J. BENNETT then read his paper "On Certain Points connected with the Structure of Dentine." Having been struck by reading some papers by Dr. Miller Ord, in which it was stated that pieces of ivory or mother-of-pearl become eroded if immersed in solution of subcarbonate of potash in glycerine, Mr. Bennett experimented with tooth structures under similar conditions. Whether immersed in solutions of the subcarbonates in glycerine, in solutions of the bicarbonates in glycerine, or in solutions of glycerine simply, the dental tissues became etched. (1) Freshly extracted teeth were ground sufficiently thin to allow microscopic examination; they were then immersed in glycerine, or one of the carbonate or subcarbonate solutions (as above) and after various periods, one to six months, examined in glycerine. (2) Freshly extracted teeth were immersed whole and afterwards prepared for microscopy. (3) Teeth were placed in solutions of glycerine in water. The changes met with after such treatment were then minutely described and illustrated by drawings greatly enlarged from microscopic specimens. Attention was confined to dentine. The dentine became transparent at the margin of the pulp chamber of a longitudinal section; the adjacent dentine was seen under a low power to be fringed and laminated. Under $\frac{1}{4}$ — $\frac{1}{8}$ in. power this appearance was seen to be due to the dentinal tubes having lost their inter-tubular tissue. The course of the tubes appeared, further, to be interrupted at regular intervals by layers of membranes having a direction parallel to the surface. The layers of membranes resembled the appearance seen in interglobular dentine, but circular apertures replaced solid globules, and oval spaces existed between the layers. Through these apertures dentinal tubes could be seen crossing from one layer of membrane to another, and completely freed of inter-tubular tissue. The tubes appeared to penetrate or arise from the upper and lower surface of the membrane. In places also the tubes arose distinctly as processes from the margins of the membrane, so as to resemble

irregular cells and processes. The tubes also were measured off regularly into short lengths by the crossing of the membrane. The number of membranes observed varied with the length of time the specimens had been mounted, the action of the glycerine appearing to go on indefinitely. In cases in which the specimens had been torn or bent, it was found that the tubes were broken off in regular lengths, being bounded at each end by a layer of membrane. Sometimes a layer of membrane would dip down and join the membrane beneath, enclosing an oval space. An examination was made of young dentine. A section taken from the anterior fang of a lower molar was immersed in glycerine and sections parallel to the pulp examined. In the centre, dentinal tubules were seen cut directly across; towards the sides the tubes were more oblique. The membranes were thus seen at every angle, but also there was seen scattered over large areas a number of cells in every variety of position. They were generally elongated stellate in shape, tubes arising from the margins like processes, and others joining adjacent cells forming a sort of fragmentary membrane. The appearances thus afforded resembled those described by Salter and others in the cup of forming dentine. Glycerine had clearly acted not destructively, since changes were brought about by it resembling normal developmental structures; it had acted selectively. Various explanations of the changes described might be offered:

(1) That the membranes merely represented a part of the matrix itself which resisted the action of the glycerine. The surface of the membrane might present different stages of calcification, and thus offer a variable power of resisting the glycerine action, the circular spaces representing portions which had been removed. This view, if correct, would accord with the theory of globular calcification in dentine. Interglobular dentine, if submitted to glycerine action, shows the membranes surrounding the globules, which fact supports the above-given theory.

(2) Another view would suppose the glycerine separated the layers of the matrix through the unequal expansion or contraction of certain parts. However, such a view is negated by Dr. Lionel Beale's statement that no tissues swell or shrink when immersed in glycerine solutions, provided these solutions are at first diluted, although subsequently they may be made concentrated. Gelatine was tested, since it is identical with the animal basis of dentine, but it did not swell in glycerine solutions, although doing so markedly when immersed in water.

(3) A third view might take these appearances as evidence of cell structure, a distinct resemblance existing to irregularly-shaped cells and processes. Under this view the spaces would be regarded as intercellular in nature.

The calcified pulps of dead teeth were examined. The outline of the original pulp cavity was indicated by abrupt terminations of the regularly formed dentine tubes. This is succeeded by a layer of complete calcification. Internally is the toughened pulp with offsets passing between and among the calcified masses which occupy the centre of the cavity. Wherever the pulp is in contact with formed dentine, defined cells are present forming a festooned outline with processes directed towards the point of calcification. These osteo-dental cells are traceable into the calcified tissue. When treated with glycerine these appearances became more marked, the inter-tubular tissue being removed, and further, cells were not only seen bordering the pulp cavity, but could be traced outwards to the primary dentine. The surface of the pulp showed circular apertures and contours resembling patches of interglobular dentine.

Upon the cementum glycerine acts powerfully, whole teeth after immersion looking dull and dead with whitish opaque patches resembling the aspect of chronically inflamed cementum. Microscopically examined, the absorption was seen to remove the whole of one layer before attacking another, commencing at the periphery and looking like the gnawed aspect of natural absorption. The lacunæ were clearly and sharply defined, and appeared somewhat in relief. Their form was usually unaltered, but sometimes resembled the appearances of lacunæ after absorption. The canaliculi and branches were traceable farther than usual. Thus it was seen that in the cementum, the least dense of the tissues, the glycerine action was the greatest; the cells being loosely united were unable to hang together and so disappeared with the surrounding decalcification.

The CHAIRMAN, at the conclusion of the paper, asked Dr. Miller Ord to express his views.

Dr. ORD congratulated Mr. Bennett upon his important and interesting paper. Referring to his own researches, Dr. Ord said he read a paper in *Nature* in which it was stated that glass covered with white ants' mud became etched. He knew, from Rainey's researches, glass became etched when exposed to the action of carbonate of lime in the presence of colloids. The regular crystal of carbonate of lime,

a rhombohedron, was, when deposited in gum solution, changed to a sphere. He had shown that the colloid annuls polarities of crystallisation, allowing simple attraction to work. When the colloid was upon the surface of the glass it drew away molecule by molecule from the glass into itself, and formed a little bed in the shape of a slight hemispherical depression. Dr. Ord, repeating Rainey's experiments, obtained even more remarkable results. He used gum, albumen, glycerine, and albuminoids, with ivory and mother-of-pearl in a parallel series. He used glycerine and nascent carbonate of lime in dealing with glass, but carbonate of soda and glycerine when dealing with ivory and mother-of-pearl. Dr. Ord regarded the action upon glass as molecular coalescence, that upon ivory as molecular disintegration. By the first term he understood the falling into one complete sphere of several spheres (as in glass experiment) when brought into contact; by the latter the dissolution and removal of the earthy material, leaving a "ghostly" sphere of organic matrix.

The contact of the glycerine and carbonate of potash with the surface of the ivory introduced a fresh colloid, and so disturbed the original arrangement, and would withdraw the earthy salts and leave the matrix behind. Referring to Mr. Bennett's experiments, he remarked it was interesting to note that in proportion as the structures acted upon by the glycerine were less compact, so was the earthy material more readily withdrawn from the organic structure. The cells referred to by Mr. Bennett might, he thought, be really re-arrangements of earthy matter.

Mr. FAIRBANK desired to elicit Mr. Bennett's view as to the true meaning of the cellular structures described.

Mr. WALTER COFFIN pointed out that Mr. Bennett's experiments gave a further value to glycerine, viz., its dissolving power over the dental tissues.

Mr. STORER BENNETT could vouch from personal knowledge that the paper was the outcome of prolonged and most careful research. He thought the results at which Mr. F. J. Bennett had arrived were of great importance.

Mr. BETTS thought Mr. Bennett's investigations might throw some light upon the pathogenesis of erosion.

Mr. HERN inquired whether Mr. Bennett had had any experience of the action of decalcifying agents upon the dentinal tissues, as it would be interesting to contrast such action with that of the glycerine.

Mr. BENNETT, replying, said he was convinced that the appearances he had described were not due to re-arrangement of salts; similar appearances were found in normal structures, such as in interglobular spaces. In answering a question put by Mr Stocken, he stated he had not cared to investigate whether or not the glycerine he used was absolutely pure, but he proposed to repeat them, using Price's glycerine. He did not propose on the present occasion to enter into the question as to what was the true nature of the cells. Dental tissues treated by decalcifying agents did not present any appearance similar to those he had described.

The CHAIRMAN, having expressed the thanks of the Society to the various contributors of communications, stated that the ensuing meeting would take place on December 3rd, when casual communications would be given by Mr. Bland Sutton and Dr. St. George Elliott, and a paper on "Metal Cap Crowns" by Dr. Mitchell.

The Dental Hospital of London Athletic Club.

THE second annual general meeting of the Dental Hospital of London Athletic Club was held on Wednesday, October 17th, Sir Edwin Saunders, the president, occupying the chair. The report of the committee showed that the past year had been one of prosperity, the various branches having been extremely successful. The financial position of the report also showed a balance now remaining to the club of £21 17s. 1d.

The chairman, after making a few remarks, moved the adoption of the report which was carried unanimously. The officers for the ensuing year were then elected. It was then proposed that a musical society should be added to the club; this was carried, David Hepburn, Esq., kindly accepting the management of it.

Various other business was got through, the meeting closing with a hearty vote of thanks to the President and Vice-Presidents for their kind services during the past year.

The Annual Dinner of the National Dental Hospital.

THE annual dinner of the past and present students of the National Dental Hospital and School took place on October 19th, at the Holborn Restaurant, the occasion being made compli-

the appearance of such a by mentary to Mr. Thomas Gaddes, the late dean, who has retired from dental practice; and thus an opportunity presented itself to the numerous friends present of recording the high esteem in which he has always been held by them, and as a small evidence of this in presenting him with an illuminated address and a very handsome gold watch and chain.

The chair was taken by Mr. Samuel Lee Rymer, who having disposed of the usual loyal and patriotic toasts, paid a high tribute to Mr. Gaddes, eulogising the untiring efforts made by him to bring the Hospital and school into a state of efficiency. That his loss would be felt no one could doubt, but if the new life he was about to follow would promote his health and happiness all who had ever been connected with the National Dental Hospital would join in wishing him success.

The presentation having been made, Mr. Gaddes rose to reply, which was the signal for prolonged cheering, and in the course of his remarks observed that at such a moment as this his vocabulary failed him and rendered him unfit to express even in broken terms his appreciation of the kind feeling evinced by those around him. He thanked them for the testimonial, which would often remind him of his old friends in England when he might be some thousands of miles away.

He took this as a fitting opportunity of saying something about himself, as it would be his last chance of addressing them. His life had been one of many disappointments, for when he commenced his professional career he aspired high and was soon sorry to find that difficulties arose, and those difficulties from without. Those in whom he expected the closest friendship turned to be his strongest adversaries, and as nature, according to Darwin, presents it, "The greatest enemies in the struggle for existence are found among like species." In another world these could be forgotten, to leave clear the reflection of those pleasant and happy associations with his friends the Students and supporters of the National Dental Hospital.

The toast of the "Staff" having been proposed by Mr. Williams, Mr. Henri Weiss responded and alluded to the honour that had been conferred on him by his colleagues offering him the post of Dean of the School. This, as many present were aware, he had accepted, but only *pro. tem.*, as he felt the responsibilities so great that to undertake, at a few moments' notice, duties involving the reputation of the School, was a step worthy only of serious con-

sideration. The generous support he had received from his colleagues during the short time he had officiated in that capacity prompted him to accept the office in full, but that decision rested rather with them than himself. It might not be out of place if he alluded to the scheme which they hoped would soon be carried out, viz., the erection of their new Hospital and School. Their position was identical with that of the Dental Hospital of London when it occupied the building in Soho Square, one wholly inadequate for successful teaching. The site and plans had been secured, but possession was deferred by an old lady who held a tenant-right over portions of the site for a few months longer. In due course an urgent appeal would be made, and he trusted that those who took an interest in the school would come forward to supply that which they so urgently required.

Mr. GADDES then proposed the toast of the "Past and Present Students," which was responded to by Messrs. Spokes and Rushton, at the close of which there was presented, on behalf of the students, a case of surgical instruments, which was accepted by Mr. Gaddes, who expressed his gratitude in suitable terms.

A vote of thanks to the Chairman, proposed by Mr. Stocken and duly responded to, brought the formal part of the evening to a close. A selection of vocal and instrumental music accompanied the toasts.

MINOR NOTICES AND CRITICAL ABSTRACTS.

The Toxic Effects of Cocaine produced by Subcutaneous Injection.

By AUGUSTUS W. ADDINSELL, M.B.

As cocaine is now so constantly employed, it is desirable that investigations into its toxic effects should be carefully made and experiences accurately recorded to prevent, on the one hand, a feeling of over-confidence in its administration, and, on the other, a reaction resulting in the disuse of a drug so valuable for producing local anæsthesia.

The first case I have to record is my own. Having suffered considerable pain from a small abscess at the root of a tooth, I went to Mr. Maitland, a dental surgeon, and asked him to remove it. He suggested cocaine; I agreed. One grain of the hydrochlorate in powder was dissolved in twenty minims of water, and

ten minims injected on each side of the affected molar. In three minutes I was out of pain. The tooth was extracted, and a second root was immediately afterwards taken out. During the operation I had not the slightest sensation of pain. I then began to feel giddy and sick. I felt my pulse; it was very rapid and weak. I had violent palpitation of the heart, with a great thumping at the chest wall, and a slight feeling of suffocation. I then became very talkative and laughed loudly. I remember insisting upon Mr. Maitland getting into his own operating chair, and my wanting to operate; this was politely but firmly declined. I now felt very sick, and tingled all over. I staggered about the room, was very pale, and my pupils were widely dilated. I was perfectly conscious, however. I remained in this condition for thirty-five minutes, when the pain in the gum began gradually to return, my pulse improved, and in an hour after the injection I returned home.

The second case is that of a lady who called upon me at 7.30 a.m. on October 3rd, complaining of great pain. She had insisted upon walking at that early hour, as she could not rest. I found a large swelling inside the mouth arising from an abscess at the root of one or two decayed molar teeth. I knew her to be very intolerant of pain. I dissolved one grain of the hydrochlorate of cocaine in twenty drops of water and injected ten drops into the mucous membrane on either side of the swelling; in two minutes the pain had gone. She began to laugh and walk about the room in an excited manner; she threw her arms about, and talked most wildly. Suddenly she fell into a chair and cried out, "Oh my legs, they feel so strange!" She became very pallid; her pulse was very feeble at the wrist, though rapid; she sighed deeply; complained of tingling all over, and burning pain at the stomach; she clutched at her throat; her eyes were staring and had a dazed expression, the pupils were dilated, and a profuse cold perspiration suffused her face which was ashy pale. I undid her dress; her heart was bounding and thumping, and the beats were very irregular. I gave her a tablespoonful of brandy and ordered a bed to be prepared for her. I applied hot bottles to her feet and hot fomentations over the epigastric region. She soon afterwards vomited, which appeared to relieve her as in about half an hour, one hour from the time of injection, she fell into a quiet sleep.

In both these cases the pupils remained dilated for some hours;

local anæsthesia was complete in five minutes and the toxic effects were evident in less than ten minutes. My patient was worse than I was, though I had the larger dose, as in injecting the second of the ten minims into my patient a few drops escaped. In Mr. Pitts' case recorded in *The Lancet* of December 24th it appears that a still larger dose was injected—nearly two grains. I also notice that the solution used was prepared at the time—I presume from the powder. This was done in the case of my patient and myself; and it would appear that a solution prepared at the time of operation is stronger and more powerful, as I have had occasion to use more of a solution prepared some time previously and kept in a bottle. Since my experiences recorded above I have never injected more than half a grain dissolved in ten minims of water; from Mr. Pitts' case and the two here noted I think we may learn that it is not safe to inject a grain, and I believe it will be found that half a grain of the hydrochlorate powder, dissolved at the moment in ten minims of water, will be quite sufficient to produce local anæsthesia and make these minor operations painless.—*Lancet*.

ANNOTATIONS.

A NEW list of Members is in process of compilation, and Members will do well to make, without delay, any corrections which may be needed either in names or addresses, or other particulars, so that the new issue may be as nearly accurate as it is possible for such a list to be.

WE trust none of our readers will fail to read, mark, learn and inwardly digest a letter from our Midland secretary, Mr. Waite, touching the Register. The subject is one of primary importance, and Mr. Waite's unselfish work demands at least the small return of attention on the part of members, and we earnestly hope it will receive it.

THE annual dinner of the past and present students of the Dental Hospital of London is to be held on Saturday, the 1st of December. The chair is to be occupied by Mr. James Smith Turner, a name that will surely rally round the table all who love the British Dental Association. The president of the Representa-

tive Board has sacrificed health, wealth, and leisure to serve his profession ever since the commencement of the reform movement, and as a result he is popular with all who appreciate straightforward courage and unselfishness. These annual gatherings have gradually grown from small beginnings to assume almost the character of a representative meeting of the profession, and it is idle to exhort people to attend, seeing that all who have the opportunity are sure to avail themselves of it.

SOME improvements have recently been made at the Dental Hospital of London which are of sufficient importance to call for notice. One of these is a room for the treatment of regulation cases, by means of which this branch of the work will be facilitated. There will in future be three additional qualified House Surgeons and a qualified Demonstrator for the work-room. The last appointment should lead to a much larger use of this room by students than has formerly prevailed.

OUR members are so well acquainted with what Mr. Fisher has written and said on the subject of compulsory attention to the teeth of school children, that it is not necessary to do more than chronicle the fact that the papers read at the annual meetings of the Association in 1885 and 1886 have been published in pamphlet form at a price that will permit of very wide distribution. For the sum of three shillings anyone interested in the matter may secure a dozen copies, and by judiciously distributing them among his friends or patients, may contribute to a wide dissemination of the facts and arguments which Mr. Fisher has so carefully gathered and so plainly set forth.

THE Edinburgh Dental Hospital and School has acquired new premises and has at the same time affiliated itself with the Royal Infirmary, under arrangements which cannot fail to be beneficial to both Institutions. We commend the basis of agreement to the consideration of those who are at present agitating for the extension of the dental department of general hospitals.

The building is the property of the Managers of the Infirmary, and is in close proximity to the Infirmary, having an entrance from the lane which separates them.

The arrangements are as follows:—The premises at 5, Lauriston Lane are to be altered to suit the requirements of the Dental

Hospital, and are held on lease by the Dental Hospital at a nominal rent.

1. One of the dental surgeons of the day to be at the call of the Infirmary manager during dental hospital hours, when required for operations in the wards.
2. One hour of one day of the week—the hour being the ordinary “visit hour” at the Infirmary—shall be devoted to clinics for the benefit of certain medical students, these clinics to be given within the Infirmary in a room set aside for that purpose.
3. That medical students shall be entitled to a further modified course within the Dental Hospital on payment of a fee.

The administration of the Dental Hospital and School remains as at present in the hands of the Dental Staff and Administrative Committee.

The main feature of the new house will be a large annexe on the ground floor, to be used as a stopping room. It will be lighted from the roof and sides and will be 25ft. broad by 50ft. long; on the same floor will be students' cloak room and lavatory, patients' waiting-room and lavatory, furnace-room for heating the building, and other offices; on the first floor will be the ordinary extracting room, the anæsthetic room, and the modelling room; on the second floor will be the mechanical laboratory, the council room, and the museum—while the third floor will be arranged for the accommodation of the housekeeper.

THE Athletic Club of the Dental Hospital of London held a Smoking Concert at Anderton's Hotel on Tuesday, the 30th October. Mr. David Hepburn occupied the chair, and performed the duties appertaining to the post with his accustomed urbanity. The programme was almost as good as it was long, which is saying a great deal in the way of praise. Members and friends vied with one another to make the evening pleasant—

“And none were sad, and few were dull,
And each one did his best,”

with the result that naturally follows when criticism is subordinated to the determination to be pleased.

WE are pleased to find that Dr. Meriam's address, “Ethics in Materials and Methods,” the substance of which appeared in our April number, has reached a second edition. Some additions have been made to it, partly to answer criticism, but chiefly to

enforce by the authority of other men's opinions, the position which the writer took up. That position was so unassailable in itself and was so forcibly put that the original address scarcely needed the support which these quotations give to it. They may, however, impress some readers, and they serve at any rate to show that the writer's paper was no mere *obiter dictum* but that it represented the feeling of some of the most enlightened members of the medical profession.

THOSE members of the Association who were present in Dublin will be aware of the fact that a number of photographs of individual members and of groups of members were taken by Messrs. Chancellor. The groups are remarkable for clearness ; in the case of the members of the Representative Board all the likenesses are admirable, and in the two others—one of them taken on the steps of Trinity Hall and the other at Howth Bailey Lighthouse—by far the larger number of members can be easily recognized. In addition to the groups, photographs—in cabinet and large size—were taken of nearly all the leading members of the Association. Members who desire to obtain copies of one or other of these photographs can do so by applying to Messrs. Chancellor, 55, Lower Sackville Street, Dublin.

WHILE on the subject of the late annual meeting, we may take the opportunity of stating that the Museum Committee regret that, owing to certain changes and alterations at the Dental Hospital in Ireland, they are unable to return at present some specimens which have been applied for. They hope to do so shortly.

AT the moment of going to press we have received the report of a meeting held at Darlington by the Midland Branch. The meeting took place so close to the date of publication of the Journal, that nothing short of the utmost promptitude on the part of the secretary of the Branch could have enabled us to publish it. As it is we have no time to comment upon the proceedings, but we cannot forbear a hearty word of congratulation to the active spirits who have set on foot the formation of a Northern Branch. We trust—we may almost say we feel sure—success will wait upon their efforts.

WE understand that Mr. E. Lloyd Williams has accepted the editorship of the *Record*, rendered vacant by the resignation of

Mr. Gaddes. We have no doubt but that under his direction the journal will maintain its past reputation, and we trust that Mr. William's health and the time at his disposal may enable him to occupy his editorial chair for many years.

At the meeting of the Odontological Society on December 3rd, 1888, a paper will be read by Dr. Mitchell "On some suggestions on Metal Cap Crowns;" and Casual Communications will be made by Mr. Bland Sutton and Dr. St. George Elliott. There will also be an exhibit of a series of storage batteries and electrical apparatus.

The Edinburgh Dental Students' Society held its first meeting for the session on Monday, the 5th November. Mr. Monroe, L.D.S., president, in the chair. Mr. Watson, L.D.S., gave the inaugural address, taking for his subject "Ancient Dental Surgery;" this was followed by a most excellent paper on "Chloroform," by Dr. Hugh Jamieson.

The Edinburgh Dental Hospital and School opened the session, 1888-1889, on the 1st of November, with an accession of new students equal in number to any previous year.

At the examinations held at the Royal College of Surgeons Dublin, on the 29th and 30th ultimo, R. Kloet received the dental diploma, and was admitted a Licentiate in Dental Surgery of that College.

We are pleased to learn that Dr. Baker has been elected to the council of the Pathological Section of the Royal Academy of Medicine in Ireland.

CORRESPONDENCE.

We do not hold ourselves responsible for the views expressed by our Correspondents.

Dental Quackery and American Dentistry.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

"Populus vult decipi et decipiatur."

"Doubtless the pleasure is as great
Of being cheated as to cheat."

SIR, — Ancient sayings of this kind, almost as old as civilization, are probably not one jot less true at this day than they were centuries ago; but whether it is good morality to give up

the fight against chicanery and fraud, merely because the depths of popular credulity seem unfathomable, is surely more than questionable. It has always seemed to me meet, not less for societies and individuals than for the State, to endeavour to the utmost of their ability to protect the weak and simple from the wiles of knaves and scoundrels. The State recognises this duty; but whether all has been done that should and might be done by private effort in this regard is more than doubtful. There was a time not so long ago, when peaceable citizens had to go about armed, each man prepared to defend himself against the ruffian and the bully; now, personal outrage is so far rare that the most timid feel little or no apprehension. It is not easy to explain why the morally simple and weak should not be equally well protected against the more subtle machinations of the whole race of rogues, of which medical and dental quacks are only one tribe. These men are as devoid of conscience as of feeling for human suffering. So far as money getting goes they thrive, and often amass wealth, and this largely because many of the public who are lured to put their trust in them cannot conceive that men should be so base. Dental diseases, because they rarely involve direct danger to life, are commonly made light of; but every dental surgeon is daily reminded of the fact that these diseases—not to speak of their indirect influence on general health—are often alone enough to render life as wretched as it can be made by physical suffering; and that, after all, the dental quack, like his medical brother, flourishes in proportion as he displays cynical contempt for human weakness and callous insensibility to human suffering. It is not to be wondered at that dental sufferers, like those afflicted with more severe maladies, should often be caught by the confident assertions of blatant pretenders, who loudly proclaim their ability to give relief or cure disease by marvellous methods unknown to ordinary practitioners.

It cannot with justice be said that the leaders of our profession have even for one moment shown themselves unmindful of these considerations. They have never faltered in the fight against falsehood and fraud or paused in their endeavours to safe-guard the interests of the public. For many years they worked at dental reform, and after many preliminary steps had been laboriously achieved succeeded in permanently establishing dentistry as a legitimate branch of the great medical profession, under the same government and administration and regulated by a special Act of Parliament. The existence of the Dentists Act, much less its scope, is still unknown to the great bulk of the public. They sadly need informing as to the provisions of the law which concerns them so deeply—for instance, that any one whose name is not on the Dentists' Register, who assumes a title implying that he is a qualified dentist may be summoned before a magistrate and summarily convicted; and that such a one cannot recover fees for professional services in a court of law. On all such subjects our

Association and its Journal give us facilities which we never before enjoyed for enlightening the public. We may safely leave the working of the Dentists Act to the Executive of our Association. The effects of the Act are only beginning; the offences which it is intended to deal with will be found within its scope; and some offenders who now seem to defy it may before the end find they have lived in a fool's (and rogue's) paradise. What I want to impress upon members now is the good which each individual may do in extending public information. It is of course of little use discussing our affairs with simpletons who supply so many victims to quacks; but we can all give information which will excite the interest, attention and sympathy of others upon whom simpletons lean for support and guidance. For myself I make it a rule to introduce the affairs of the dental profession to every intelligent patient whose attention seems worth attracting, and I have been astonished at the numbers who have given sympathetic attention to my explanations. In this way I have myself initiated not a few public men into the mysteries of medical law in general, and dental law in particular, and some there are who, thanks to me, might pass a satisfactory examination on the subject. In my efforts I have been much assisted by our admirable Journal; and it has been my custom to give copies containing articles of public interest to any individuals with whom I may have been conversing upon the topic. Were the cost less, I should certainly feel inclined to distribute many copies of numbers such as your last, with its admirable leader bearing upon the present subject; and I would ask by the way, might it not be possible to supply members at a reduced rate, who wished for a dozen or more copies of a particular issue.

The marvellous processes which the quacks bring forward to cure all the ills the teeth are heir to, vary from year to year—or at least a new cry is invented when the old one becomes stale. Years ago with the invention of amalgam stoppings—an invention the common property of all dentists—it was the "Patent Succedaneum," with which all teeth, "however badly decayed," were filled and saved. Next, the introduction of vulcanite as a base for artificial teeth, led every quack to proclaim that he held the only patent for the "New Flexible Gums." After that, when nitrous oxide gas came into use, many of the quacks found either that they (and not Sir Humphrey Davy) had discovered the gas, or that they were the original introducers of the new anæsthetic which provided the world at last with "Painless Dentistry." These myths becoming in their turn used up, we have now as a new cry—"American Dentistry," "Crown, Bar and Bridge Work," "Artificial Teeth Without Plates," "Loose Teeth Fastened," and I know not what wonders, all to be obtained only from the genuine American dentist.

It would be an insult to the American dental profession and par-

ticularly to well-known and respected Americans practising in England, to suggest that they could have any feeling but detestation for the advertising sham American pretenders and their disreputable American assistants to whom I am referring. Every educated dentist knows that there is nothing in American dentistry to render it different from that practised in any other country, and that to speak of American dentistry, is as absurd as to talk of American medicine or surgery, or American astronomy or any other science. Modern dentistry, like every art based on science, owes its perfection to the work of men of every nationality. No real man of science, and no respectable practitioner of any nationality keeps his knowledge secret—to profess to do so marks a man as a pretender or a quack. Dental science and art cannot be more properly called American than German, French or English.

For instance, the most important work of the present day on dental pathology—the processes of disease within the teeth—is that of Professor Wedl of Vienna. Again, for our knowledge of the development of the teeth, among other things at the foundation of dental art, we are largely indebted to French observers such as Legros and Magitôt. Furthermore, were it not for the labours of English dentists, physiologists and surgeons, modern dentistry could not be by any means what it is. To John Hunter, the famous surgeon of the last century, to Sir John Tomes—whom we have happily still with us, long may he live—and to English men of science of the earlier and later generation whose names are as familiar in our mouths as household words, dental art is deeply indebted. By the way, it is upon John Hunter's experiments that the operation of transplanting and replanting teeth is established—an operation which has lately been made a subject of American (?) quackery. Lastly, the operation of fixing artificial crowns to broken down roots—so called "American Crown, Bar and Bridge Work"—is in its effectual practice entirely based upon the fact that modern antiseptic surgery enables the dentist to heal, cure, and save a vast number of diseased or decayed teeth and stumps which were formerly condemned to extraction. It is the same in general surgery. Twenty-five years ago a large number of cases of bad compound fracture and such-like injuries underwent amputation; now not only are limbs saved, but wounds, whether of accident or operation, are made to heal without local inflammation or general surgical fever; and by the practical application of precisely the same discoveries we now cure and save almost any tooth or root which is not actually and entirely dead. Prior to building up broken teeth or fixing artificial crowns to roots, it is, of course, imperative for success to bring them into a healthy state, and the process by which this is brought about is the system of antiseptic surgery which in every civilised language is mainly associated with the name of the illustrious English surgeon

Sir Joseph Lister, who has done more than any living man to establish the system on a scientific basis and bring it to perfection. If, therefore, as we may cordially admit, we are indebted to Americans (albeit, by no means to American advertising quacks) for many ingenious mechanical contrivances indispensable not only in "Crown, Bar and Bridge Work," but in every department of dental surgery, they in their turn are, as they will gladly agree, indebted as deeply to men of science of other nationalities.

As a result of these combined labours of the whole scientific world, the achievements of modern surgery, including dentistry, have become, in truth, marvellous. Operations are now-a-days undertaken with confidence and carried out with a success which, in former ages, would have appeared miraculous; but there is no miracle, neither can surgeon or dentist work a miracle, and the quack who promises to perform what would really be a miracle, "to save all teeth, however badly decayed," is guilty of deceit, certain, if acted upon, to be followed by a proportionate amount of pain and injury, such as in greater degree would attend the attempt of a surgeon to save all limbs, however badly injured or diseased. An exemplification of this—one of many which I have seen—has recently occurred in my experience, a case in which serious inflammation, leading to chronic disease of the antrum, with pain, disfigurement and ill health, lasting for many months, was caused by a necrosed tooth, which ought to have been extracted, but was allowed to remain on the advice of an ignorant, unscrupulous practitioner.

When it comes to the consideration of individual cases, it is found that the number of instances is limited in which artificial teeth can be, with the greatest advantage to patients, fixed immovably to stumps or remaining teeth, and every qualified dentist knows how to discriminate these cases. But the quack, by his promises in his specious advertisements, pledges himself to carry out in every case the same system, in spite of the fact that it may be far from the best in many instances. Hence, the "unfortunate patients who apply to a quack with cases not suitable to the method of treatment which he vaunts, find very often the result is pain and discomfort or misery, the infliction of which might easily have been avoided by any honest practitioner.

In common fairness to the present and rising generation of British dentists, the public must be fully informed—and this is one of the things I am striving for—that dental education in England, organised by the Medical Corporations under control of Government, and carried out at dental schools second to those of no other country, turns out dental practitioners as accomplished and fully equipped for practice as any in the world, and the public must be shown that the British dental diploma forms a voucher of professional competency than which none is more to be relied upon. The dental

diploma of British colleges is, with few exceptions, superior to any American dental degree, for which reason the British authorities refuse to recognise or register any but those of two or three of the leading United States colleges. An American dental practitioner styling himself "Doctor" and puffing himself as superior to his English brethren, may, on enquiry, very often be found to possess only the inferior diploma of an obscure college, which may have cost no other effort to obtain than the judicious outlay of a few dollars. However much they may be required in other countries where a dental profession does not exist American dentists are not urgently needed in this country, but if they come properly qualified and conduct themselves as professional men, English dentists will receive them into their ranks without prejudice, as they do now and have done in the past.

Respectable American dentists, like those of every other country, are governed in their conduct by that unwritten code of professional ethics—a code which is merely the expression of gentlemanly feelings—which forbids a practitioner to attract patients by puffing advertisements. The advertising dentist holds exactly the same relation to the dental as the advertising doctor holds to the medical profession; and although there are, of course, more and less offensive ways of professional advertising, it will often be found that the men who carry on practice with the aid of puffing advertisements, are unlicensed adventurers seeking, by cunningly-worded advertisements, to palm themselves off upon the public as highly-qualified practitioners.

Two cases, which have been under the care of a well-known practitioner within the last few months, may be briefly narrated to illustrate my remarks and show the kind of thing which is offered to the public as American dentistry. The first an elderly lady, finding her dentist was away for a holiday, thought she would try a well-advertised American dental establishment. This is one of the numerous institutions kept up by a notorious family of English quacks under different aliases. The patient's few remaining lower teeth were all loose, and some had fallen out from wasting of the sockets. Her object was to get her "loose teeth tightened" and "artificial teeth without plates." Soon after my friend's return to town she went back to him. She had been in pain and discomfort ever since she left the hands of the quacks. On examination, an extremely ill-fitting narrow thin frame made of gold of inferior quality was found fixed in her lower jaw by wires extending around the loose teeth and so tightly forced into cavities of decay at the necks of the teeth, that it could be removed only after widely opening the hooks with pliers. The whole apparatus was foul with decomposing adherent *débris* of food, and, the patient being somewhat fastidious, this alone had, of course, kept her miserable. The work was just such a construction as one would expect might be made by an inferior mechanic utterly ignorant of dental physiology. Exercising (as he expressed it) about as much profes-

sional knowledge as would certainly be found in any intelligent second year's student of the Dental Hospital, my friend made an accurate cast of her mouth and constructed a vulcanite frame, which, being carefully fitted into its place, according to the well-known system and rules of our art, gave what support was possible to the loose teeth which it easily embraced, whilst removable at pleasure to clean, and brought the patient into that comfortable condition into which any honest dentist, as we all know, can bring patients in similar cases—particularly when, as in this instance, the patient had been used to artificial teeth. The quack could not do this. He was bound to humbug the patient. It would not answer his purpose to supply her with a vulcanite frame, similar to that which had been made for her upper jaw; he must make it very small ("no plates") and fix it immoveably ("loose teeth fastened"), or it would not correspond with his advertisement, and he would not make the false pretence necessary to get his extortionate fee.

"Loose teeth tightened"—what a telling line for an advertisement! It is a type of the string of false suggestions which quacks so cunningly employ. Teeth become loose from several totally distinct causes, calling for equally differing treatment. Some cases yield to suitable measures, others are among the most difficult with which the dentist has to deal. This latter class are especially those in which the bony sockets of the teeth, sometimes prematurely but more often with the approach of age, gradually waste until the teeth are shed. This in an advanced degree was the state of the poor old lady whose case I have mentioned and who was put to torture by treatment calculated only to aggravate the mischief for which she sought a remedy—treatment which no honest educated dentist could possibly have adopted.

The second case, a lady, had been to the same American establishment and on the same errand, desiring "Painless Dentistry," and artificial teeth on the "Crown, Bar and Bridge work" system without plates. Her mouth was examined and she was told the cost would be thirty guineas, of which fifteen must be paid at once. She agreed, went through the treatment, settled the balance, and had been in severe pain ever since. She had returned several times and was told the pain was neuralgia. Exercising again about as much diagnostic skill as would be displayed by a junior student at the Dental Hospital, my friend found the seat of pain in a left lower bicuspid which was roughly filled with a white cement. Picking this out, it was found it had been inserted over an exposed nerve which was mortified down to near the apex. This tooth under antiseptic dressings, the nerve being of course extirpated, soon settled down and is now permanently filled.

On her right upper jaw she had lost the crowns of the bicuspid and first molar. To the diseased suppurating roots of those teeth

were affixed artificial crowns by a piece of "bar work." The work was a source of constant pain owing to the tenderness of the roots beneath; she could not use it in mastication and it was filthy and foul from impossibility of properly cleansing it. The case was one not at all fitted for the plan of treatment adopted, and of this there could be no difference of opinion in the minds of dentists qualified in the rudimentary principles of their art.

It is almost incredible but nevertheless true, and it shows the gullibility of some patients, that this lady, an apparently sensible woman, had not very long before in a country town been swindled out of twenty-five guineas by an agent, under another alias, of the very same gang of sham American dentists, for a few worthless artificial teeth on the "patent atmospheric principle."

To pursue organised quackery into its dark and foul recesses, and drag it into the light of day is a disgusting task, but very necessary—a task in which, in my opinion, every decent member of the profession ought, in spite of natural loathing, to take a part. This is, it seems to me, particularly incumbent upon successful men—men who have attained high professional position and whose social status is assured. Such men's motives cannot be easily impugned, nor can their actions be ascribed to selfishness or jealousy. They and we all owe it as a duty to the public, to our common profession, and more particularly perhaps to the band of bright young recruits who, in the improved position of dentistry, are becoming attracted to our ranks. If only for the sake of these young men we ought to strive that, after devoting years to educate themselves as members of an honourable profession, they shall not find themselves in a department of practice which, if it may be justly considered less important, can be fairly called less reputable than any other branch of the medical profession; that if not proud, they shall not feel ashamed of the title of dentist, and that they at least shall not—as some of us now may—feel dishonoured or humiliated by the designation.

I remain, your obedient servant,
AN ENGLISH DENTIST.

"Anæsthesia."

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—May I ask you to oblige an old subscriber by finding space in your next issue for a few remarks which have been evoked by the perusal of Dr. Corley's able paper on "Anæsthesia in Dental Surgery," and read by him at the recent Annual Meeting of the Association. The discussion which followed has, also, supplied food for reflection. The subject being an important one to the profession must be my apology for addressing you.

In 1848 my experience commenced with chloroform as an anæsthetic and in 1868 with nitrous oxide—forty and twenty years respectively. The longer my experience extends the more I am convinced of the superiority of the latter over the former in all dental operations requiring the aid of an anæsthetic.

There is no operation a dental surgeon is likely to be called upon to undertake, but what can be as well performed—and in most cases infinitely better—under nitrous oxide than under any other agent. With Mr. Kirby's remark I agree. It is not an impossible feat to extract twelve or fourteen teeth during the effects of one administration. Mr. Underwood's reply is beside the question, that "it is as easy to extract thirty-two as fourteen, providing they are loose and ready to drop out," in that case no gas would be required and no one would think of giving it.

The dentist who cannot (in nine cases out of ten) take out more than four teeth can lay no claim to be regarded as a successful operator with nitrous oxide. In all cases free from unusual complications, any operator possessing a fair amount of skill will experience little difficulty in clearing either an upper or lower jaw during the insensibility produced by one administration when the gas is properly managed. I am acquainted with gentlemen who do this daily and do it well. When this can be accomplished with the aid of the gas—and hardly the fringe of its capabilities as an anæsthetic has yet been touched—the question may be asked, Why is nitrous oxide so comparatively little employed in surgical and dental operations? The fact is a reproach to the intelligence of our profession that the world has hitherto derived so little benefit from the greatest boon ever conferred upon suffering humanity by scientific discovery.

It is the interest as well as the duty of dental practitioners to instruct their patients and the public in this matter. Why is this plain duty so persistently neglected by those who ought to be the warmest supporters of nitrous oxide?

I am, yours faithfully,

L.D.S.ENG.

Double-Chambered Vulcanisers.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—Messrs. Ash & Sons' criticism of my paper on Wirth's apparatus seems to call for some reply on my part. Previous to writing that paper I had read the articles by Mr. Childs, to which Messrs. Ash & Sons were good enough to refer me, and I still think I am justified in the statement that "the *recent* development in vulcanizers" has been in the direction of double chambers.

With regard to the criticisms on my remarks as to the safety valve,

it is surely superfluous to point out that there is nothing new in this, more especially when no such claim of novelty was advanced in the paper.

With regard to their criticism of my preference of a steam safety valve to a fusible plug, I think that, notwithstanding the favorable experience of Messrs. Ash, there must be a considerable uncertainty as to the actual melting point of fusible metal alloys which have been frequently reheated ; moreover, a fusible plug may be no safeguard in the event of any sudden and unequal heating of a vulcaniser. Experts recognize what may be best described as a kind of innate "cussedness" even in the best regulated safety-valve, hence it would be no disadvantage and an extra safeguard to have both the safety-valve and a fusible plug inserted in our vulcanisers.

My reply to the criticism on my remarks as to vulcanising is simply this : that in Wirth's apparatus the process must take place in super-heated steam without the presence of any water, while in the single-chambered vulcaniser it may or may not, according to the care or carelessness of that often too variable factor, the laboratory assistant, who is frequently not above thinking that his own experience is often a better guide than even the most carefully printed instructions. I certainly do think that Messrs. Ash have done well to call attention to a much neglected point, namely, the excessive and unnecessary amount of water frequently used in the vulcanising process.

Yours faithfully,

GEORGE CUNNINGHAM.

Cambridge, *November 7th*, 1888.

The Dentists' Register.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—As the year draws to a close, I would remind our Members that a new edition of the Register will soon be prepared, and that now is the time to contribute any information as to deaths or removals. In the case of deaths, all that is needful now is to call the attention of local Registrars of Deaths to the requirement of the Dentists Act, mentioning at the same time any death which may have taken place in the district during the year. In the event of removals the party who has changed his address should himself give notice of same to the Registrar of the Medical Council, 299, Oxford Street, London.

The accuracy of the Register depends upon ourselves, and a very little care is sufficient if each Member will take his proper share in the work.

I am, Sir, yours truly,

W. H. WAITE.

Southern Counties Branch.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—On behalf of this Branch I beg cordially to invite those metropolitan members of the Association, who reside within our district, to join the Branch. Such an addition to our roll of members cannot fail to be a source of interest and strength to us, particularly at this period when we are contemplating the visit of the Association to Brighton next year. I am requested also to say that members of the Association not residing within our district, desiring to strengthen us by membership, will be heartily received. The yearly subscription is only 5s.

Yours truly,

J. DENNANT.

Royal College of Surgeons of England : Pass List.

THE following gentlemen having passed the necessary examinations, at a meeting of the Board of examiners on the 7th instant, were at the same meeting admitted Licentiates in Dental Surgery :—Ivan John Howard Boyton, William Henry Dolamore, Frank Gannon Grimsdale, Frank Arnold Harsant, Albert Stephen Hayman, Hubert Lindsay Curling Hope, Frederick Richard Howard, William Thompson Madin, Edward Alfred Manton, Alfred Ernest Marten, James Mountford, Athol Cravnant Pritchard, Leonard Charles Smith, Percy Lawrence Webster, Charles Winterbottom, M.R.C.S.

Eleven candidates were referred. The next examination will be held in May, 1889.

OBITUARY.

WE regret to announce the death on the 22nd of October last, on board the steamship "Circassian," of Edwin John Winterbottom, M.R.C.S., L.D.S.Eng., at the age of fifty-three years. Mr. Winterbottom was the brother of Mr. Augustus Winterbottom who has for some time filled the post of one of the examiners in dental surgery at the Royal College of Surgeons. Mr. Winterbottom was on his way home from Canada, and had previously practised at Sloane Street with his brother.

NOTE.—ANONYMOUS letters directed to the Secretary of the Association cannot receive attention.

P.O. Orders must be accompanied by Letters of Advice.

Communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

Subscriptions to the Treasurer, 40, Leicester Square.

All Contributions intended for publication in the Journal must be written on one side of the paper only. The latest date for receiving contributions for the current number is the 5th of the month.

SPECIAL NOTICE.—All communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

THE JOURNAL
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VOL. IX.

Examinations.

THE stir which has recently been made upon the subject of competitive examinations and their effect upon the minds of those who have been trained for them, is not without interest to those who have to deal with merely qualifying examinations and is an opportunity for the setting of our own houses in order, if so be that they need it.

It is contended by Mr. Frederick Harrison and others who are of the same way of thinking, that the preparation for the modern type of competitive examination necessitates a kind of study which enables a candidate to answer questions upon a large variety of topics with a glib facility and self-satisfaction, whilst, at the same time, it discourages him from acquiring a deeper knowledge, because it does not "pay." Nay, more, by the inculcation of a strong mental habit of learning things in this sort of way, it actually prevents him from ever acquiring a real grip of the subject in hand ; his

mind is trained to skim and to learn almost by rote, and eventually cannot do anything else.

Thus we are training up, according to them, a generation of persons widely informed in a superficial sort of way, much of their knowledge being probably so feebly held that it must soon be forgotten, and with their originality stunted by the mental treadmill upon which all alike have laboured.

Many wide questions are opened up as to the possibility of finding an adequate substitute for competitive examinations, which do not concern us here, inasmuch as no one will be found to doubt the necessity of at least some test as to the qualifications of those desirous of entering a profession like that of medicine or of any of its branches.

It so happens that a significant experiment has been tried within the last few years in the conduct of medical examinations; until the year 1884 the College of Surgeons, excluding the preliminary in general education, had only two professional examinations, namely, the primary, which included anatomy and physiology, and the final, which embraced medicine, surgery and midwifery. At that time it was necessary for a candidate to pass in each and all of the subjects embraced in the examination in order to pass at all.

But in 1884, when the conjoint scheme came into operation, the Colleges of Physicians and Surgeons conducted their examinations jointly and three professional examinations were instituted, namely, a first, in which elementary anatomy and physiology, and chemistry were included; a second, in which anatomy and physiology were taken up; and a final, in medicine, surgery and midwifery. But perhaps the most important change lay in the permission given to the student to pass in all or in any of the branches of the examination; *i.e.*, a man who was referred in anatomy might, nevertheless, pass in physiology which he would

not need to take up again ; thus he could pass his second professional at two attempts, and his final at three attempts. This grace was never accorded to candidates for the fellowship, this being regarded as an honour examination and not being conjointly conducted.

The effect of the change has been to enormously increase the number of rejections, it being found that the candidates come up far less well prepared, on the off-chance of getting through something ; and examiners of considerable experience are almost unanimous in thinking that the result has been exceedingly disastrous to medical education, encouraging "cram" and lowering the general average standard. Indeed, so strongly has this been felt that the scheme is already undergoing modification, it being proposed that a candidate shall no longer be allowed to pass, for example, his anatomy, unless he shall have shewn a reasonable proficiency in physiology, *i.e.*, shall have obtained a certain number of marks, though not enough to pass him in that subject. In a general way it may be said that any necessity for allowing a candidate to take up his work piecemeal implies that he is examined in unnecessary subjects or else required to carry them to an unnecessary point, otherwise there could be no hardship in requiring him to carry them all in his head at one time.

It surely cannot be contended that a practitioner, who is to go forth to the world as competent, might not reasonably be expected to know his medicine, surgery and midwifery at the time of his receiving his qualification, and therefore, even if he has on some previous occasion displayed an adequate knowledge of the one, he would not be hardly treated if expected to keep this up, and be required to shew that he has done so, on the subsequent occasion. The tendency of some of those in authority is towards increasing the practical portion of the ex-

aminations and making this as searching as possible, the preparatory sciences of anatomy and physiology having been disposed of on a previous occasion, and this appears to be a right direction in which to make a change.

It has been at times proposed to divide up the dental examination into two portions upon these lines, but the time seems hardly ripe for such a change at present, as the subjects which are required of the candidates are really not so extensive that a man of average ability has any great difficulty in carrying them in his head in such a manner as to secure himself against all risk of failure. There can, on the other hand, be no doubt that it would be desirable to include more of dental mechanics than is at present the usage, and probably to still further develop the practical part; but, as against any subdivision of the examinations, it may be urged that the Colleges of Surgeons and Physicians are feeling their way back in the matter and that the dental examiners are already complaining that the candidates lack anything like real grip of their subjects, though they answer the usual text book questions with some facility; if you present to them some unusual combination, which requires them to put two and two together, they break down; and the experience of examiners upon the conjoint board has been so far altogether in the direction that the effect of subdivision and multiplication of examinations is disastrous in its effects upon the mental qualities of the student.

WE would remind our readers that the new List of Members will shortly be produced with some improvements, and that alterations and corrections must reach the secretary on or before the 21st of December. The great convenience of this form of "directory in brief," has been generally felt, and surely no one will be so lazy as to allow it to be imperfect for lack of an intimation of change of address.

ASSOCIATION INTELLIGENCE.

Meeting of the Representative Board.

A meeting of the Representative Board was held on Saturday, December 1st, J. Smith Turner, Esq., in the chair. The following gentlemen were present :—Messrs. J. Humphreys, J. H. Redman, Breward Neale, G. Cunningham, W. A. Rhodes, Morgan Hughes, J. H. Fothergill, R. T. Stack, H. B. Mason, Rees Price, W. B. McLeod, G. C. McAdam, F. Hall, J. Fenn Cole, W. H. Waite, F. H. Balkwill, J. Lee Pike, Cornelius Wheeler, T. E. King, Storer Bennett, F. Canton, W. H. Coffin, W. Hern, S. J. Hutchinson, L. Matheson, H. Mummery, C. S. Tomes, F. Weiss, C. West, A. J. Woodhouse, and Morton Smale (hon. secretary).

It was decided to refer the question relating to the granting of higher degrees in dentistry back to the Business Committee for further consideration.

The HON. SECRETARY reported that he had written to the Lord Chamberlain and had seen Mr. Truman, dentist in ordinary to Her Majesty's Household, with regard to some advertisements in which dentists had called themselves Surgeon-Dentists to the Queen's Household. The latter called attention to the fact that the terms used in the advertisement were not those of his appointment. The Lord Chamberlain replied as follows : "The gentlemen you refer to hold no appointments of any kind which entitles them to style themselves Surgeon-Dentist to the Queen's Household. The Lord Chamberlain has, however, no knowledge of any means of preventing them so styling themselves, as their offence does not appear to come under the Act dealing with the unlawful assumption of Royal Arms."

Mr. HUTCHINSON resigned from the Journal and Finance Committee and the remaining members were re-elected.

The TREASURER reported the balance at the bank to be £416 18s. 8d., that seventy-one members were one year in arrears and fourteen for two years.

Mr. J. W. BUTCHER, 107, Praed Street, W., was appointed Auditor for the year.

Mr. KING moved the following Resolutions which after an exhaustive discussion were voted upon.

That the following addition be made to Bye-Law No. 8, after the words "President-elect."

- (1) "All previous Presidents and each retiring President shall be eligible for election by the Association in General Meeting assembled, as Vice-Presidents for life, provided that they continue to be members of the Association.
- (2) "The President and President-elect shall be *ex-officio* Members of all Committees of the Association."
- (3) "And that in Bye-Law No. 15 the words 'and Vice-Presidents' be inserted after the words 'President-elect.'"

No. 1 was lost, the two remaining ones being carried.

Mr. COFFIN, in the absence of Mr. Dennant, moved the following Resolution.

"That in future the readers of papers or communications, or abstracts of the same at the Annual Meetings of the Association be restricted to 15 minutes, and that speakers thereto be limited to 10 minutes, and that copies of all such papers, accompanied by abstracts, be transmitted to the Hon. Secretary of the Representative Board at least 20 days prior to the Meeting, for official approval."

After a lengthy discussion a sub-committee was appointed to consider the question.

Several cases of infringement of the Dentists Act were referred to the Business Committee.

Mr. F. A. Sayles, L.D.S.Eng., was elected a member of the Association.

West of Scotland Branch.

THE annual general meeting was held in the Hall of the Faculty of Physicians and Surgeons, St. Vincent Street, Glasgow, on the 24th October, at 8 p.m., Mr. JAMES CUMMING, President, in the chair. The following gentlemen were balloted for, and duly elected members of the Branch; W. Holt Woodburn, L.D.S.Glas., D.D.S.Mich.; Thos. Wilson, L.D.S.Glas.; and Alex. Whyte, L.D.S.Glas.

The Hon. Secretary read his report as follows:—The past year has seen the demise of two members of the Branch, Mr. W. M. Adamson, and Mr. J. G. Whyte, both of Glasgow. Six other registered dentists in the West of Scotland have died, and a list of these will be sent to the Hon. Secretary of the British Dental Association with a view to a correct Register for 1889.

Three gentlemen have been elected members of the Association, bringing the total membership up to forty-one. It might be desirable to see if special efforts can be made to increase largely the membership of the Association and Branch.

Eight Council meetings and five ordinary meetings have been held during the year. By the courtesy of the Council, the majority of these meetings have been held in the Hall of the Faculty of Physicians and Surgeons, Glasgow.

The Council of the Branch have continued during the past year to watch over the interests of the members and of registered dentists. Several cases of infringement of the Dentists Act of 1878 have been referred to the Representative Board and Committee in London, with satisfactory results in all cases.

The Treasurer's report showed a balance of £10 19s. 2d., in favour of the Branch.

The following gentlemen were elected office-bearers for the ensuing year:—President, James Cumming, L.D.S.Glas.; Vice-President, J. Moore Lipscomb, L.D.S.Eng.; Treasurer, D. R. Cameron, L.D.S.Glas.; Council, J. R. Brownlie, L.D.S.Eng.; J. A. Biggs, L.D.S.Glas.; William Dall, L.D.S.Glas.; Oswald Fergus, L.D.S.Glas.; W. S. Gillespie, L.D.S.Glas.; John Stirling, L.D.S.Eng.; Hon. Sec., Rees Price, L.D.S.Eng.

Mr. J. A. BIGGS then brought forward an interesting casual communication on Malformations, which will appear shortly.

Some discussion followed, and with the usual vote of thanks to the chairman the meeting closed.

The next meeting will be held on Thursday, December 27th, when the President will give an address. A short paper on "Plastic Fillings" will be communicated by Mr. John Stirling, L.D.S.Eng. (Ayr.)

Southern Counties Branch.

A SPECIAL meeting of the members of the above Branch was held at Brighton on November 17th, J. Cornelius-Wheeler, Esq., President, in the Chair, in order to make preliminary arrangements for the suitable reception of the Parent Association on the occasion of the forthcoming annual meeting at Brighton, in August, 1889.

The minutes of the last meeting having been read and confirmed, the President announced that the Council had with extreme regret been obliged to accept Mr. Dennant's resignation of his post as hon. secretary of the Branch, an office which he had most ably filled since its foundation, and that Mr. Morgan Hughes of Croydon had been appointed his successor.

A vote of thanks to Mr. Dennant for his invaluable services was then proposed by the President, seconded by Mr. Rymer and supported by Mr. Arthur Underwood, who intimated that his own labours as editor of the Journal had been considerably lightened by the care which Mr. Dennant had always bestowed upon his reports before sending them up to be published.

Mr. DENNANT, in returning thanks for the vote just past, said he was most grateful for all the kind things that had been said of him, and if in fulfilling what he considered a public duty he had thus secured their approval he was amply rewarded. His resignation just then was a matter of regret to him. Considerations of health alone, however, had influenced him, and he had acted under medical advice; the duties at times were onerous, and it was the extra pressure of outside work of such a character that he felt he must avoid. He hoped that he might still be useful as a member of council. He thought the Branch was to be congratulated on the appointment of his successor, Mr. Morgan Hughes, of Croydon. He had given proof that what he undertook he thoroughly performed, and his professional standing, his thorough good nature, and his nearness to London made him in every way a most desirable hon. secretary.

Mr. MORGAN HUGHES also briefly expressed his thanks to the President and Mr. Dennant for the kindly terms in which they had mentioned his name.

The following resolutions were then proposed and carried:

I.—Moved by the President, seconded by Mr. J. T. Whatford (Brighton):

That in order to give a suitable reception to the British Dental Association upon the occasion of its visit to the Southern Counties Branch next August, a *General Committee* be formed for the purpose of securing the requisite funds.

II.—Moved by Mr. G. Henry, seconded by Mr. J. H. Redman:

That the present meeting constitute the General Committee, with power to add to their number. *Names*:—Messrs. J. Cornelius-Wheeler, S. L. Rymer, F. J. Van der Pant, J. E. Welch, Duncan W. Amore, J. H. Redman, W. B. Bacon, G. Henry, J. Dennant, C. B. Stoner, A. Gabell, Octavius Fox, E. M. Tod, W. Harrison, W. Barton, W. R. Wood, Junr., E. T. Cooksey, F. J. Bailey, J. C. Foran, Stephen Hoole, J. H. Reinhardt, T. H. Elliott, E. Moore, J. T. Whatford, Douglas Cauth, W. T. Trollope, B. A. Williams, Morgan Hughes.

Resolution III.—That subject to the approval of the Representative Board the following gentlemen do constitute an *Executive Com-*

mittee to make all necessary arrangements for the next Annual Meeting of the British Dental Association, to be held in Brighton in August, 1889. Messrs. Alderman Rymer, J.P., J. Cornelius-Wheeler, W. B. Bacon, J. Dennant, J. H. Redman, J. E. Welch, W. R. Wood, Junr., Walter Harrison, E. M. Tod, J. Henry Whatford, J. Smith Turner, C. S. Tomes, Morton Smale, F. Canton, A. S. Underwood, W. Coffin, G. Parkinson.

In the discussion upon these resolutions it was mentioned that though the Executive Committee must necessarily be a small one, it was intended at a later date to form other committees (notably a Reception Committee), with the idea of enlisting the help of a large number of members of the Branch.

A considerable amount of money was promised to the Guarantee Fund at the close of the meeting, and it would facilitate matters if members would kindly return the subscription forms as soon as possible to MORGAN HUGHES, 4 Wellesley Villas, Croydon.

Boundaries of Branches.

ON Saturday, December 1st, a Conference of Presidents and Secretaries of the five English Branches, was held at 40, Leicester Square. Present:—Mr. W. E. Harding, in the Chair; Messrs. Cornelius-Wheeler, F. Hall, G. C. McAdam, T. E. King, H. B. Mason, J. Humphreys, W. A. Rhodes, Morgan Hughes, and W. H. Waite. It was agreed to recommend to the several Councils a scheme dividing the whole of the counties of England among the five branches, with the exception only of Middlesex. This exception was made in the hope that ere long a Metropolitan Branch will be formed.

When the Branch Councils have approved the scheme above referred to, we hope to publish the details *in extenso*.

Irish Branch.

QUARTERLY MEETING IN DUBLIN.

ON Saturday evening, December 8th, the last quarterly meeting for 1888 was held in the Albert Hall of the Royal College of Surgeons in Ireland, at eight o'clock. The President of the British Dental Association occupied the chair.

Mr. W. BOOTH-PEARSALL, F.R.C.S.I., read a paper "On Oblique Rooted Teeth," which was illustrated by twelve specimens, mounted

in the little glass bottles used at the Annual Museum in August, and some diagrams. The President of the Association, Dr. R. T. Stack, Mr. D. Corbett, junr., Mr. G. M. P. Murray, and Mr. Charles Wall took part in the discussion that followed the paper, to which Mr. W. Booth-Pearsall replied. Mr. Charles Wall, L.D.S.I., read a paper on "Improvements in Cheek Restorers or Plumpers," and shewed an exceedingly ingenious device to meet the needs of a patient. Mr. W. B. Pearsall, the President, Dr. Stack, and Mr. G. M. P. Murray took part in the discussion, to which Mr. Charles Wall replied.

Dr. STACK made an announcement on the part of Mr. R. Hazelton, F.R.C.S.I., hon. treasurer, that the funds of the Branch were in a satisfactory condition, and also drew attention to the still more agreeable fact that the expenses of the Annual Meeting had been fully met and that no further call would be made on the guarantors. He considered the meeting was creditable to the Irish dentists who had subscribed, as the heavy expenditure was borne by thirty-three members.

Mr. WALL exhibited two plumpers or cheek-distenders.

Mr. PEARSALL exhibited a water motor about eight inches in diameter using one gallon a minute at 60lbs. pressure, giving about 2,000 revolutions a minute. The construction was simple and the power was more than sufficient to drive the dental engine. If a number were made they could be produced at the cost of twenty shillings each, and there was nothing to get out of order. Mr. Pearsall also showed a model of the teeth of a patient with unsymmetrical erosion of the cutting edges of the incisor teeth. Mr. Pearsall exhibited a lower jaw found in digging the foundation of the new premises of the Ulster Bank, College Green, and pointed out its peculiarities. Professor Cunningham, the anatomist of Trinity College, Dublin, had examined it and pronounced it to be the lower jaw of an individual about twenty-five years of age and probably the jaw of a Dane or Norseman. The place where the jaw was found is within a few yards of the site of the Thing mote or parliament held in Dublin by the Danes, who for some centuries held the city as a stronghold till they slowly mingled with the surrounding population.

Mr. PEARSALL exhibited a remarkable upper central incisor presented to the proposed permanent museum of the Dental Hospital of Ireland by Mr. Gartrell of Penzance. Mr. W. H. Elwood of Belfast, exhibited a vulcanite tongue protector to be used by an

epileptic patient to prevent wounding the tongue. At the conclusion of the business the President introduced to the notice of the meeting, in a racy and humorous speech, a receptacle for the use of the members of the Branch at their meetings in which to place some contributions for the benefit of the Dental Benevolent Fund, and the whimsical design produced not only much amusement amongst the members but the encouraging subscription of 48s. in small sums. The President thanked the Irish Secretary very heartily on behalf of the Branch for the useful gift, and he hoped before the end of the year the members would have succeeded in making a contour filling of the cavity in the cleverly designed molar, with its open crown cavity and roots designed for use as handles with all the grotesqueness of a nightmare. A vote of thanks having been passed to the chair, the Branch was adjourned till January.

The President of the British Dental Association and Messrs. Daniel Corbett, jun., F.R.C.S.I., R. H. Moore, F.R.C.S.I., C. Wall, L.D.S.I., R. T. Stack, M.D., G. M. P. Murray, R.C.S.I., S. G. Reeves, L.D.S.I., A. J. Watts, L.D.S.I., Charles Merrilees, L.D.S.I., McCallum Smith, L.D.S.I., W. H. Quinn and the Hon. Secretary were amongst those present.

ORIGINAL COMMUNICATIONS.

Implantation of Teeth.

BY GEORGE CUNNINGHAM B.A., D.M.D., L.D.S.

(Continued from p. 767.)

Younger's Method.—This now brings us to consider Dr. Younger's present method of operation, and I cannot do better than describe the operation as I saw him perform it at the clinics of the International Medical Congress. The operation was further increased in interest by the recognition of one of the English contingent in the chair as a patient. I immediately exacted a promise from our friend Gartrell, of Penzance, to give me an account of the operation from the patient's point of view. The patient was forty-eight years of age, and had lost two lateral incisors some four years ago, and had hitherto worn a partial upper plate. The alveolus was considerably absorbed, and the gum formed the usual marked crescentic depression between the central and the canine on each side of the mouth. A median

incision was made from the centre of the labial aspect of the central incisor across the depression to the corresponding centre of the labial aspect of the canine, and the gums dissected from the alveolus for some little distance. After selecting two trephines, which corresponded with the two principal average diameters of the root of the tooth to be implanted, he began with the larger one, estimating the depth to which he should carry it by a reference to the measurement of the length of that part of the root. He then followed with the smaller trephine, and similarly formed a cavity for the upper part of the root, and then with the giant cone bur he tapered and formed the apex and sides of the cavity, meanwhile trying the tooth to be implanted several times. In a wonderfully short time the tooth was placed in position and firmly ligated with silk. In this case, on examining the artificial socket on the right side by means of a blunt probe, it was evident that the outer plate of the alveolus had been quite removed by the trephine, and the gum perforated on the labial aspect some distance from the margin. The socket on the left side, however, was complete on all aspects. The time occupied in preparing instruments, taking measurements, &c., was about ten minutes; the actual time of the second operation—that is, forming the artificial socket and implanting the tooth—was only about six minutes, and the whole clinic in which the two teeth were inserted, even including delays, did not exceed three-quarters of an hour. Dr. Younger lays considerable stress upon the necessity of sterilising all instruments, syringing the mouth and the cavity with a 1% solution of mercuric chloride. I cannot help thinking that too much stress seems to be laid upon the necessity of these antiseptic precautions. In an operation such as this in the cavity of the mouth, strict Listerism is not attainable. I do not depreciate in any way the observance of these precautions being taken; but I think my criticism is justified when the operator, after carefully sterilising his hands, proceeded to dry them on an ordinary towel which had been freely exposed to the atmosphere. The history of the teeth which were implanted in this case was obscure; they certainly had been extracted some time, and therefore had become perfectly dry. Previous to their being placed in the sterilising solution the pulp cavities and canals had already been thoroughly cleansed and filled with Hill's stopping, from an opening on the palatal surface of the teeth. With regard to the effect of the operation upon the patient, I must say he seemed

to stand it uncommonly well, and, from my observation of this and other cases, I certainly feel that this aspect of the operation should be no great barrier to its being adopted. The tooth when first implanted had a very white, unnatural look; but a decided change was perceptible in quite a short time—the colour becomes uniform with the other teeth in from two to six weeks. It was indeed extremely interesting to observe how implanted teeth, chosen haphazard so far as colour is concerned, become almost, if not really, indistinguishable from the normal natural teeth.

The following letter from Mr. Gartrell clearly describes these operations from a different point of view—that of the patient :

October 26th, 1887.

DEAR CUNNINGHAM,—In reply to your enquiry *in re* notes on my implantation case, I send you the two teeth used, and I shall be glad if you will have them examined under a microscope, and let me know if there is any pericemental membrane on them or not. They are, as you see, the right and left superior laterals, but whence they came, and to whom they belonged, I cannot say. I believe they were picked out from a lot of extracted teeth at some dentist's at Washington. Nearly all who spoke to me as to the operation were curious to know the severity as regards pain. My answer has been that it is quite as bad as having a tooth out. After the first incision the detaching of the periosteum, before drilling the hole, is the most painful. The drilling and burring out of the socket is, however, bad enough, and got worse as it neared the end. In my case, however, I think it was worse than usual, as the whole of the outer or labial plate of the socket for the right lateral was cut away; and the instrument finally passed through the gum on the labial surface, which was afterwards held together by a stitch of silk thread. The left lateral had a very thin plate of bone on its labial surface, but the trouble with this tooth was that it was a very thick one, as you can see by looking at it, so that it came in the way of the bite. Dr. Younger tried to correct this by grinding off the cutting edges of the lower laterals, but he did not take off enough to do any good; the consequence was that after five or six days' use the silk ligatures had slackened a little, the teeth got very loose and moved with the least possible force—such as suction in drinking, &c. The right lateral could also with very slight pressure be pushed up into the gum an eighth of an inch too far, the root pressing the gum outwards before it. The left lateral was also being constantly interfered with by the lower teeth; also the hurry sometimes in travelling prevented my taking as much care of them as I might have done at home. In fact, there ought to have been a platinum plate struck up to fit the palatal surfaces of the whole of the front teeth, with the platinum passing up over the cutting edges of the two implanted teeth so as to

protect them and to keep them steadily in their place. I got my cousin, a dentist in Ottawa, in Canada, to tie the teeth with fresh ligatures, but they got so loose and uncomfortable that I concluded that it was useless to persevere any longer ;* but I will try the operation again at home when I can get two fresh good teeth and can give proper attention to taking care of them afterwards. In my case Dr. Younger worked very hurriedly, taking about six minutes in inserting the left lateral, reckoning from the first incision to the tooth being placed *in situ*. I felt that I could have stood the pain better if a longer time was taken, but he wished to operate against time and astonish the natives. I think he made a mistake in not leaving a plate of bone on the labial surface of the right socket by drilling the hole more towards the palate. This might perhaps have interfered with the tooth taking its place in the arch properly ; in which case I think it would be better to place an artificial tooth upon a natural root at the proper angle. I should have been glad if cocaine had been tried in drilling one of the sockets, so as to note the difference in the pain ; but the whole operation was done hurriedly, and proper care was not taken afterwards, which no doubt accounts for its failure.—Yours sincerely,

J. H. GARTRELL.

Dr. Younger also performed other clinics, which I have no doubt will be duly recorded.

Dr. Louis Ottofy made an artistic implantation of a right upper incisor. The tooth replaced had been extracted some seven years. The history of the implanted tooth was unknown, but was an ordinary dry extracted tooth. The patient, on being questioned as to the pain of the operation, said it was not much, and would be quite ready to undergo it again. In this case the operator demonstrated the great utility of the Mellotte moldine apparatus, by means of which he quickly struck up a cap of thin gold plate (32 American gauge). This was fixed in the mouth with white cement, and must constitute a valuable adjunct by placing the implanted tooth under the best possible conditions for union.

In some earlier cases which have been reported, the apical end of the canals was closed with gold screws, the ends being smooth and neatly polished. Such a proceeding seems to us not only unnecessary, but really detrimental, by causing a possible source of irritation and unnecessary exposure of the cementum ; just

* On further enquiry, Mr. Gartrell informed me that the teeth got so loose that he could not get on with them about ten days after insertion, and on the twelfth day his cousin replaced them again, when he kept them in for another day ; then the silk ligatures gave out again, whereupon he placed the teeth in the little box in which he sent them to me.

as in replantation, excising the end of the root seems disadvantageous.

To digress for a moment from the clinics, I spent several days in the genial society of Dr. Younger, in New York, when I had the opportunity of inspecting the results of some of his operations performed about a year ago. I merely cite one case as being not only typical, but readily accessible. There is a man of colour, one of the *employés* at the "S. S. W." New York Branch, who had a right upper central incisor implanted on the 5th October, 1886. The tooth replanted had been removed three years and a-half before the operation of implantation. The appearance of the gum and tooth is perfectly normal and natural. The tooth implanted was an old dry tooth, and has given the patient no trouble or bother. The patient is extremely proud of this tooth, but not unnaturally resents somewhat strongly the needless pulling about, which some hundreds of dental examiners have deemed necessary to bestow upon it.*

A very interesting application of implantation was made by Dr. Younger, in the case of the wife of a well-known dentist in New York. There was congenital absence of two laterals, which constituted in the mouth of a pretty woman a considerable deformity. The two centrals having been previously brought in apposition, two incisors were implanted with the happiest results from an æsthetic point, and with the most promising prospects from a surgical point of view.

The subsequent inflammation in such cases is usually of the very slightest, apparently causing little uneasiness to the patient. His experience is that very few patients complain very much of the pain, most of them asserting that it is not more painful than the excavation of a very sensitive cavity.

Dr. Younger has implanted some two hundred teeth with, as far as he knows, some twenty failures. It is a pity, however, that this estimate of 10 per cent. of failures is not based on absolutely reliable statistics.

It may not be uninteresting for you to know that the fee he charges for the operation is one hundred dollars for a bicuspid, and one hundred and fifty dollars for an incisor or molar implantation. The larger fee for the incisor is accounted for, not by any

* N. Y., 30th June, 1888: This tooth is still in place and as sound as the adjoining central.—F. C. Harmstad.

extra difficulty of the operation, but because of a greater difficulty of obtaining suitable teeth. The greatest number of implantations he has made in one month have been five, of which four were, I believe, contiguous. This case he describes as being still quite a success, and a source of continual gratification to the patient. His earliest operation, which dates back over three years, is still a success.

It must be remembered that Dr. Younger's special contention is that the life of the pericementum is capable of being resuscitated just as "mummy corn" retains its vitality for an indefinite length of time. This alleged analogy is somewhat unfortunate, for amongst botanists the statement as to the vitality of mummy seeds is as discredited as is the statement as to mummy gold fillings amongst dentists. A correspondent in "Nature," vol. 35, 1887, pp. 114, 463, 582, clearly shows that competent botanists do not accept the case of the germination of seeds taken from Egyptian tombs as authentic, and have universally condemned as utterly worthless the evidence given in support of alleged instances of the germination. The fruitful source of error has been the deception at the outset of the credulous experimenter by the Arab. One correspondent points out that the mummy wheat of one well-known traveller grew up in the form of *oats*—a plant not cultivated by the ancient Egyptians, but now grown in the land they inhabited—though this did not shake his faith in the genuine source of his supply.

All the operations which I have described to you have been cases in which he maintains he has availed himself of this vitality, and that in selecting a tooth for implantation he does not care how long it has been extracted, provided that the pericementum still invests the root, which he says a little experience always enables one to decide. In the case of the teeth implanted for Mr. Gartrell, which I only examined carefully *after* their removal from the mouth, I must say I could discover no evidence of pericementum. Professor Greenfield and other experts who have examined them support this view. They also agree with me in still refusing to accept Dr. Younger's theory as to the persistence of pericemental life.

Teeth to be employed.—After deciding to adopt the operation of implantation, the first question one has to determine is whether it is better to employ dry teeth which have necessarily been out of the mouth some time, or those still invested with a live pericemen-

tum as in teeth recently extracted. The question of procuring the requisite teeth soon becomes a very serious and difficult one for the individual operator, and there can be no question that, from the point of view of supply, the feasibility of employing dry teeth may solve an otherwise insurmountable difficulty. The desire and hope of the operator is to procure a true physiological union, rather than a mere mechanical retention of the scion tooth in the artificial socket, and for a variety of reasons, which we will shortly discuss at greater length, the employment of teeth with a live pericementum, though presenting infinitely greater difficulties in the way of supply, would seem to offer better prospects of attaining that end.

While most of our American confrères, therefore, have followed Dr. Younger's later practice in implanting dry teeth, I have deemed it better to revert to his earlier, and I think better, practice, of employing only those with a live pericementum.

It must also be admitted that the use of teeth with a live pericementum necessitates much greater care in the handling of the scion teeth during the process of preparation, and also exacts a considerable expenditure of time when it may be ill afforded, since the dry specimens can be prepared at one's leisure. It is also easier to have a much larger choice of dry than of moist teeth, a point of considerable importance, since the space to be filled may be either abnormally wide or inconveniently narrow, but whereas the first appearance of the implanted dry tooth is extremely unsightly and unnatural, the use of the moist variety is attended with no disadvantage as to colour.

Of course in the unsurmountable absence of such a tooth, I would not hesitate to use one of the dry variety, since whatever may be our theory as to the process of retention, there is no doubt as to the fact that a large number of such teeth are doing good service after a sufficiently long period of trial.

Methods to be employed.—The instruments especially adapted to the operation are already somewhat numerous, including the Younger trephine, the circular knife of Rollins, and the crib knife of Ottofy. The pain dependent on the operation is no doubt greatly due to the nature of the instrument. From my own limited experience I think the easiest plan consists in boring a small hole representing the axis of the new socket, and then enlarging with rapidly cutting bone reamers with a guiding point to follow the first perforation. Instead of a sliding guide, as in the Younger instruments, to indicate the depth of the socket, I have

had the drills themselves graduated which serves the same purposes and effects a saving of time. Messrs. Hallam & Son have succeeded in making these instruments from my rough designs, and from the experience of my last operation they promise well. These instruments should be employed in an engine without any spiral "wrist," and with a large and heavy driving wheel such as the old Bonwill engine. In order to facilitate the filling of the root canals, &c., of the scion tooth, and to preserve the pericementum from injury during that process of treatment, I have designed a simple holder which, by firmly grasping the crown and leaving the pericementum quite free, enables one to perform the necessary operations with the minimum amount of injury to this membrane.

Medium for the scion tooth.—As it is not always practicable to at once transfer the scion tooth to its new socket, and as the tissues no doubt do retain their vitality for an, as yet, unascertained limit of time, it is advisable to have some medium in which to keep the tooth moist and if possible aseptic. One naturally turned to those so-called normal fluids employed in the physiological laboratory, since when fresh they are said to cause very slight change in the tissue as they more or less resemble the fluids with which the tissues in the body are surrounded. These normal fluids are:—

- (a) The aqueous humour of the eye.
- (b) Blood-serum.
- (c) Normal saline solution (.75 Na. Cl.).
- (d) Iodized serum.

On consulting Mr. Langley, the well-known physiologist, he advised me rather against employing any of these, but rather to keep the teeth in plain water at a temperature just above freezing point as being most likely to prevent tissue and septic changes. It would therefore seem from this that the ingenious hot water bath, designed by Dr. Kirk for keeping the scion tooth in a sterilising solution at 103° F., is rather a disadvantage than otherwise where teeth with a "live" pericementum is employed.

As it is certain that many failures in replantation and transplantation were due to the teeth being ruined by lethal doses of carbolic acid, and as the refrigerative method is not always practicable, no stronger solution than an, at most, two per cent. solution of carbolic acid, or a 1 in 2,000 solution of mercuric chloride, should be employed for keeping teeth for implantation purposes.

NOTES ON MY OWN CASES.

CASE I.—On the 26th November, 1887, in the course of a demonstration of immediate root filling in connection with my lectures on operative dentistry, to the students of the National Dental College, a man and his wife presented themselves as patients. The woman had only the two right upper incisors remaining and was wearing an artificial denture. The lateral incisor had recently had an elaborate and excellent gold filling inserted on its disto-palatal aspect by one of the students, while the other incisor was offered to me as a fit case for the demonstration. I considered it my first duty to point out to the students the lack of judgment displayed in devoting any, and more especially any prolonged conservative treatment in such a case as that, since it was obvious that the patient might have a more artistic and a more efficient artificial denture in the absence of the two remaining incisors. Such a case is only typical of many others of only too frequent occurrence in which radical treatment by extraction is more conducive to the permanent well-being of the patient than the conservative treatment by simple occlusion of a carious cavity or the more prolonged process of pulp or root canal treatment and subsequent filling. It is also typical of a large and constant source of supply of live teeth suitable for implantation, and yet altogether devoid of the moral objection which has already been advanced, and that with perfect justice, against the practice of certain practitioners who have in the past been guilty of an injustice and a wrong by becoming a party to a conspiracy by which one poor unfortunate individual was induced for a pecuniary temptation to part with a useful and essential tooth for the purposes of transplantation into the mouth of the dentist's wealthy patient.

On examining the mouth of the husband of this patient, it was found that the crown of the right upper incisor was completely gone and the root very considerably decayed and affected with a chronic alveolar abscess, evidently of long standing. After some little persuasion, both patients agreed to the following operations, by which the husband was enabled to remedy an unsightly defect in the front of the mouth by utilising the teeth lost by his wife, a loss which was in reality a distinct gain to her, both as regards function and appearance.

In order to effect this transference of the tooth, under the best

possible conditions, and not merely for the purpose of giving the promised demonstration of immediate root filling, the putrid contents of the pulp chamber and root canal were immediately removed under rubber dam and mainly by the means of Morey's nerve drills. After syringing the canal with a one per cent. solution of mercuric chloride, the root canal was filled with oxychloride of zinc, and the crown cavity with phosphate cement. It was however allowed to remain in the mouth for three days in order to demonstrate, as it successfully did, the favourable result of such operative procedure, as well as to afford some little time for the cure of the chronic abscess at the root of the right upper central incisor of the husband, which was extracted on the evening of the 26th November.

On the morning of the 29th November, the central incisor was extracted from the mouth of the woman (aged about thirty-six) and kept until required in a weak solution of mercuric chloride (1 in 2,000).

On examination of the mouth of the man (aged thirty-seven), the abscessed condition of the socket of the right upper incisor was found considerably improved, though the gums generally were still in a much inflamed and unhealthy condition from considerable deposits of salivary calculus and the generally dirty condition of the mouth. The root of the scion tooth was very much larger than the root which had been extracted. It was, therefore, necessary to considerably enlarge the socket, so much so as to entirely remove the case from being one of transplantation to one presenting all the conditions and characters of implantation into an artificial socket. On examination (after extraction) the scion tooth showed unmistakable traces of having been abscessed. The periosteum of the upper third of the root was inflamed and thickened, while the extreme apex was denuded of periosteum and much roughened, thus presenting unmistakable evidence of previous absorption. No abscess sac, so called, came away with the scion tooth on extraction. The lower fourth of the root was completely denuded of periosteum, mainly from recession of the gums and absorption of the alveolus. The scion tooth was out of the mouth just about half-an-hour and was securely fixed into the socket, in which it loosely fitted, by a metal splint covering the two adjoining teeth, and secured in position by phosphate cement.

Subsequent examinations proved that the wounded socket healed quickly and without the slightest trace of suppuration. The splint

was removed at the end of five or six weeks, when the tooth was found to be fairly firm. That firmness gradually increased until its condition is now described by the house surgeon of the National Dental Hospital as follows:—

“June 22nd, 1888: Your first patient came up last week voluntarily to show me his tooth of which he is very proud and well he may be, for it is *quite firm* and *painless* with no pericementitis present.”

CASE II.—On the afternoon of the same day (29th November, 1887), I inserted the right upper lateral incisor from the woman mentioned in the previous case in the mouth of H. E. W., a medical student at Cambridge University, aged twenty-six, for whom I had been obliged to remove the partially absorbed remains of the lateral incisor fractured high up in the socket some years previously. The condition of the operating field is described in my notes as follows: “Inflammation from the irritation produced by the fractured tooth subsiding, and the lower part of the alveolus completely gone.” The operation for this implantation consisted of the enlargement of the socket in its whole extent for the reception of the larger rooted scion tooth. In this instance, also, the scion tooth showed signs of slight apical chronic inflammation of the periosteum which was absent on the lower fourth of the root, as already described for its fellow in the previous case. It was transported from London in a weak solution of carbolic acid, not more than two per cent., while the root canal was filled out of the mouth, during which process the periosteum was carefully protected by being held in a double folded napkin kept wet with mercuric chloride solution (1 in 1,000). Six hours intervened between the extraction and the implantation of that tooth. It was secured with a thin gold splint fixed with phosphate cement, which was removed at the end of a few weeks. No further treatment was necessary except an endeavour that was made quite recently to induce the gum to grow a little further down on the lower part of the root which was devoid of periosteum. The implanted tooth presented a most natural appearance when last seen (June 8th, 1888), and I would especially call attention to this case, as it is a type of that too frequent disfigurement, a yawning blank in the front of the mouth, remedied in a way which every candid observer is bound to admit, is unequalled by any other known operation in dentistry. The only doubt as to the operation is as to its permanency, and experience alone can clear up that

uncertainty. At present it promises well, despite the disadvantages of a scion tooth rather beyond the desirable age, and already beginning to undergo partial atrophy by the loss of the lower part of the periosteum and the consequent and undesirable exposure of a considerable part of the cementum, the least resistant of the dental tissues, when exposed to the vitiating fluids of the mouth. When this implantation does fail, apart from the possibility of repeating the operation by a further implantation, it will still be possible to apply any of the remedial measures generally adopted in such cases, which are probably only two in number, viz., (a) an artificial tooth with projecting wires built into cavities made in the at present non-carious contiguous teeth, an operation in any case which I should deem ill-advised from the uncertainty of its duration and the injury it must necessarily effect on the teeth of anchorage; (b) an artificial plate, inconvenient to wear and probably more or less injurious to the neighbouring teeth and the subjacent mucous membrane. The only future disadvantage to which the patient has been exposed is a very slight extra absorption of the alveolus than would otherwise have occurred. It may be also well to remark that this patient, like others, is now in no way sensible of the sentimental, and to many the insurmountable objection of having in his mouth a tooth of another individual, and he glories in the comfort that this tooth has been entirely free from the considerable pain and bother he has had with his other teeth.

CASE III. was that of A. B. C., a healthy young barrister, twenty-three years of age, who had lost his first upper bicuspid in October, 1884. The absorption of the alveolus was therefore quite complete and the gum normal and healthy. The scion tooth was a left upper second bicuspid from the mouth of a healthy young lady, aged thirty, extracted in order to prepare the mouth for an artificial denture on the same day (2nd December, 1887). The root canal was filled in the usual manner, while the distal cavity was filled with amalgam and a cavity in the crown with gold. The periosteum seemed fairly healthy, but only covered about two-thirds of the root. During the three hours the scion tooth was out of the mouth it was kept moistened by a solution of mercuric chloride, 1 in 1,000. It fitted loosely into the artificial socket, and was fixed with a gold splint secured by phosphate cement. On the following day I refixed the splint in a way which further conduced to the comfort of the patient.

The gum was slightly congested, but no pain was felt except on pressure of the implanted tooth, which was loose but not "wobbly," as immediately after implantation. No further treatment was necessary. The splint was retained for about five weeks, when it was removed and the tooth found to be fairly firm.

As it is usually supposed that the operation of implantation must necessarily be a very painful one, the following notes on the operation from this point of view jotted down by this patient at the time in his own words may not be without interest.

"Stage 1. Lancing gum and detaching periosteum from bone. Pain not very great.

"Stage 2. Making the socket. Very little pain at first, but it materially increased as the operation progressed.

"Stage 3. Implantation, &c. No pain. On the whole I had far less pain than I expected, and what pain I had, though sometimes severe, was never acute. There was none of that thrilling pain incident to the boring of a tooth."

The patient is so far satisfied with this operation that he intends very shortly having the corresponding tooth on the other side, which has also been lost for several years, replaced by a similar operation.

CASE IV. was that of W. H. W., a healthy but rather nervous undergraduate, aged twenty-one, who had lost his left upper first bicuspid several years previously. The gum and alveolus was therefore in the same fully absorbed and healthy condition as in the previous case. The scion tooth was extracted with three others, on the 4th February, 1888, from the mouth of a healthy young lad, aged fifteen, for the purpose of correcting an irregularity, accompanied by interstitial caries. The root canal and crown cavity were treated as in the previous cases. From a naked-eye appearance, which for such a purpose may possibly be absolutely unreliable, a large part of the root seemed to be entirely stripped of periosteum. The scion tooth was out of the mouth about six hours, and was kept moist by a 1 in 2,000 solution of mercuric chloride. Owing to a slight curve in the scion tooth it was found to fit so tightly into the artificial socket on one of the trials, that it was thought a pity to remove it again. The case was accordingly dismissed without having it attached by any splint or even ligature. On inspecting the case nine days afterwards the scion tooth was found to be much looser than on implantation.

The patient said that it was also slightly tender on pressure while eating, but did not otherwise give him trouble. On the 2nd March, just a month after the operation, the case was again inspected, and the tooth found to be much firmer again. When last seen (28th May, 1888), it seemed very firm, and in quite a healthy condition.*

CASE V. was that of J. H. G., a barrister, aged thirty-nine, who had lost his left upper first bicuspid more than ten years previously. The scion tooth was extracted on 4th February, 1888, from the mouth of the lad mentioned in the previous case. The root canal and crown cavity were treated as in the previous cases. To the naked eye the periosteum seemed fairly complete on the distal, and only partially so on the labial surfaces, while only slight patches were observable on the palatal and mesial aspects of the root. The scion tooth was out of the mouth over twenty-four hours, and was kept moist by a 1 in 2,000 solution of mercuric chloride.

Before undertaking to practise the operation of implantation on the living subject, I had taken the advisable precaution of practising the operation several times on the cadaver, during which I became painfully conscious of the danger of perforating the antrum. In the present case on syringing out the debris in the artificial socket, the non-appearance of the contents of the syringe excited suspicion, and on passing a probe there was no further doubt as to the existence of a perforation into the antrum. The socket was, however, practically complete, so the scion tooth was duly inserted, and held in position by a gold splint fixed with phosphate cement.

This case was under our direct personal observation for the next twenty-four hours, and I am glad to be able to state that beyond a slight sensation of fulness on that side of the face, no immediate disagreeable result followed the perforation into the antrum. In a few days the splint came away, and it was deemed better by Mr. Baldwin, who kindly took charge of the case, to retain the tooth by filling up the relatively considerable spaces between the implanted and the contiguous teeth by means of gutta-percha.

Mr. Baldwin, who with Mr. Charles Tomes inspected this case about the 20th June, 1888, writes as follows :—

* Oct. 10th, 1888.—Re-examined this case ; tooth perfectly firm, gum quite healthy, with good attachment all round the neck of the tooth, which is only distinguishable from the other teeth by its being slightly smaller, and by its having the crown considerably disked down to articulate with the lower teeth.

37, CAVENDISH SQUARE, W.

June 25th, 1888.

MY DEAR CUNNINGHAM,—The tooth you implanted was very firmly fixed in its place, more rigidly in fact than the other sound teeth which had not been interfered with. The gum around it was normal in colour and hardness, and tightly applied to the neck of the tooth. The connection had all the appearances of being a vital one. The patient told me he had been using the tooth perfectly, freely and fearlessly for some little time. I had hoped the alveolar process would be rebuilt to some extent around the root, but of this there was no sign. The depression of the gum, caused by previous absorption, remained on each side of the root as at the time of the operation.

The explanation of the exceeding tightness of the tooth is, I think that the root was actually gripped by the gradually contracting fibres of cicatricial tissue, which must, in the nature of the case, form the bond of union in these cases. I regret to say, that herein lies, to my mind, an indication of future failure. The cicatricial tissue will go on contracting, during which time the tooth will be very firmly held. The contraction will diminish the size and number of the blood vessels, and greatly reduce the vitality of the tissue. This tissue will then be very liable to absorption, as we know the *normal* connection of teeth is now-a-days, as shown by the frequency of premature loss of sound teeth. I cannot imagine a connection of this nature lasting efficient more than, say, about two years. Perhaps this is a pessimistic view of the situation.

Now about the complications you refer to. All the three molars are alive. On the gum high up between the roots of the first and second molars, is a flat sessile growth about one-third of an inch long. This growth contains the orifice of a sinus which discharges a very little pus. That is to say, a little pus can be detected in the orifice on first examining, but when that has been removed it is not possible to squeeze out any more. After a little difficulty, I got a very fine blunt probe to follow along a fistulous track in a direction horizontally inwards and backwards, but chiefly backwards. This track ran in the substance of the bone, but was lined with smooth easily-bleeding membrane. I could not feel any bare bone. I do not think the sinus had any present connection with the implanted tooth, nor do I think it had any connection with either of the three molars. The explanation of it is difficult, but on the whole I am inclined to think it is a fistula leading from the antrum. Whether its primary cause was the operation for implantation, it is impossible to say. I think the whole public and profession are indebted to you for giving implantation a fair trial. I do not think it necessarily a barbarous operation, if it proves a success, but, for my own part, I doubt the duration of the success being of sufficient length to make it worth while.

I am, yours sincerely,

H. BALDWIN.

CASE VI. was that of G. S. G., a healthy undergraduate of twenty-one, who had lost his first upper left bicuspid, which had been extracted several years previously. The conditions were quite normal as in several of the previous cases. On the right lower side of this patient's mouth the second bicuspid had erupted irregularly and was growing completely out of the arch of the jaw towards the cheek. By the loss of this entirely useless tooth, which was already decayed where it pressed against the other teeth, an irregularity was corrected, a source of certain disaster to the neighbouring first bicuspid and molar was removed, and a scion tooth was provided for the replacement of the lost upper bicuspid. The root canal and two carious cavities in the crown were treated as before. Owing to the difficulty of extraction of a tooth so placed, the periosteum was partially stripped off in the process. It was kept moist in the usual solution (HgCl_2 —1 in 2000), and was out of the mouth one and a-half hours. Owing to the tightness with which the tooth fitted the artificial socket, no splint or ligature was required. On the following day the tooth was still firm and comfortable.

On the 8th June examination of the tooth showed the presence of a small sinus just above the margin of the gum. The patient stated that about a week or fortnight after the operation the tooth became very loose, but after continuing in that state for some days, it gradually got firmer again. It is now quite firm and satisfactory but for this sinus, which seems to be indicative of slight necrosis of the alveolus.

This is the only case which has required any subsequent treatment, which consisted in an injection of peroxide of hydrogen, and of mercuric chloride solution, and touching the margin of the gums with crystals of cupric sulphate. In this instance, too, the attachment of the gum on the distal surface seems very high up on the root, and is not nearly so satisfactory as in the other cases.

(To be continued.)

WE believe the Irish Branch intend having a Benevolent Fund collection at all their future branch meetings; if the other Branches followed this example it would be all the better for the Benevolent Fund.

REPORTS OF SOCIETIES AND OTHER MEETINGS.

The Odontological Society of Great Britain.

THE ordinary monthly meeting of the Society was held at 40, Leicester Square, on December 3rd. The chair was taken by Mr. S. J. HUTCHINSON, M.R.C.S., L.D.S., Vice-President. Present : a good attendance of members and several visitors.

The Librarian (Mr. FELIX WEISS) intimated the reception of a work by Dr. Kühn, and the Curator (Mr. STORER BENNETT) announced the addition of the skull of a rodent—the Paca—to the Society's collections.

Mr. J. W. SHILLCOCK, L.D.S.I., of Cannes, was elected a member of the Society.

Mr. J. BLAND SUTTON, F.R.C.S., read a communication on "Congenital Pharyngeal Tumours." Dr. Walker in 1887 presented a specimen of a calf's head showing a cleft palate, a median fissure of lower lip and symphysis menti, and bifid condition of the tongue. Dr. Windle had dissected the specimen and shown the fissures had been caused by a tumour connected with the under surface of the basi-sphenoid, projecting downwards, and attached to the mandible. It was connected by a pedicle with the pituitary fossa. It was composed of two bony parts connected by a ligament, being, in parts, of ivory-like density and containing two molariform teeth. Mr. Sutton had recently met with similar specimens. The first was the head of a foal. Upon median section a remarkable tumour was found wedged in between the two maxillæ. It was irregularly oval suspended from the under-surface of the basi-sphenoid by a pedicle of muscle and fibrous tissue. One part resembled a superior maxilla and had three well-formed molar teeth, and was covered by mucous membrane : the other part, of two fused mandibles, each with three formed molars and also covered with mucous membrane. Attached to its right side was a tongue, and at its anterior extremity was the normal tongue of the foal. Hence, the tumour consisted of supernumerary upper maxillæ, rudimentary mandibles, and an extra tongue. The skull presented also some duplication of parts. In the second specimen, that of a pig, two bodies existed, while the head was single, but included a pedunculated tumour hanging from the under surface of the basi-sphenoid. It consisted of two fused mandibles covered with mucous membrane, with erupted teeth along the outer margin. A smaller pedunculated body was

found attached to the palate. The creature had a bifid tongue, single œsophagus and stomach, but duplicated intestinal tract and genito-urinary systems; two larynges existed. In a third specimen, the head of a pig, a tumour was seen wedged in between the two upper maxillæ; it contained unerupted teeth and a piece of pilose skin. The palate was cleft. The tumour in the palate was connected by a fibroid band with a bony mass containing unerupted teeth, lying in the floor of the mouth and covered with pilose skin and mucous membrane. This mass represented two fused mandibles; there was a double tongue, one on each side of the mass. The teratoma lodged between the maxillæ was composed of coalesced supernumerary maxillæ containing teeth and covered by pilose mucous membrane; the mass was connected by a band with the fused mandibles; the three specimens exemplified the process called dichotomy. The first specimen taken by itself might have been explained as being an example of impacted suppressed foetus, but the two last show that all are probably explicable as an abnormal division of the cephalic extremity of the embryo.

The pharynx and soft palate are sometimes the seat of pedunculated pear-shaped congenital tumours arising either from the basi-sphenoid or the pharyngeal aspect of the soft palate. The interior is usually occupied by cartilage, the exterior covered with piliferous skin possessing sebaceous glands. The smaller pedunculated palate tumour in the second specimen conformed under the microscope to the characters of those congenital pharyngeal tumours. Mr. Sutton is therefore inclined to regard the latter as instances of dichotomy. Finally, the same process which produces a double monster from a single germ acting upon germs of teeth, gives rise to the dichotomy seen in gemination.

The CHAIRMAN felt the subject thus ably introduced to them was one of great interest.

Mr. CHARLES TOMES remarked upon the curious fact, for which Mr. Sutton could give no explanation, that the teeth in the included tumours were far more developed than those of the animal which contained the tumour.

Dr. ST. GEORGE ELLIOT spoke upon copper amalgams. His experience and the researches he had conducted some years previously, led him to dissent from the statement that copper amalgams neither shrank nor expanded. Recently he had re-investigated the question, using the "specific gravity" test and

applying it to the amalgams of various makers, whose names he proposed to suppress for obvious reasons. Using large masses of amalgam, he had been enabled to compare one set of tests with another. In every instance, either shrinkage or expansion occurred. Tubes were shown filled with copper amalgams and diagrams, tabulating his results, which demonstrated shrinkage from $5 \frac{1}{10}$ to $6 \frac{3}{10}$ per cent. It had often been asserted that silver was an expanding agent; to test this he made some silver amalgams, but found a considerable amount of contraction took place. He had stated years ago, that amalgams never remained the same for two days together; his present tables corroborated this. Specimens of amalgam were submitted to the Society, which showed a marked figure of curvature. Referring to breaking strain, he said he had found amalgams heated in a particular way and allowed to cool, re-heated after two or three days, set very rapidly. Copper amalgam if under-heated was weakened as the mercury was driven out. Dr. St. George Elliot also showed an asbestos soldering block which was in two parts. If these were used together an excellent annealing furnace was obtained. He also showed an ingenious contrivance for making and rounding corundum wheels at the same time.

After a brief discussion in which Mr. Harding (Shrewsbury), Mr. Amos Kirby (Bedford) and Dr. St. George Elliot took part,

Mr. W. E. HARDING mentioned a case of tooth fracture. A patient aged seventeen, had fallen in January and fractured a front too thin two pieces; the fracture extended downwards. Upon extraction, the tooth was found to be divided into two halves, the fracture extending across the pulp chamber. The two halves had become united by secondary dentine. Upon the suggestion of the Chairman, Mr. Harding presented half the tooth to the society for microscopic examination.

Mr. W. MITCHELL, D.D.S., then read a paper upon "Some Suggestions on Metal Cap Crowns." Metal cap crowns present greater assurance of success than other forms of crowning. They embody the three essential features of crowns: (1) adaptability to the greatest number of cases (bicuspid and molars); (2) cleanliness; (3) indestructibility. They also restore articulating surfaces better than can be effected without their aid. Turning to the practical side of the subject, it is suggested that the tooth or root to be capped, being in a healthy condition, is prepared for the crown. If necessary to restore the bite, the height is reduced.

by corundum wheels worked on the dental engine. In bicuspid and molars where the root is level with the gum, one, two, or three platinum or dental alloy pins are placed in the pulp canals. These are fitted and made of requisite length and then driven well home. The next step is to remove all enamel, going carefully round the cervical edge with a specially devised instrument. The tooth is then ready for the cap; coin gold rolled to No. 5, B.P.G. for the band and No. 3 for the top is preferred, because it works more uniformly than other kinds. In preparing the band, no model save the tooth itself is used, as this ensures an accurate fit and the band is better adapted to the requirements of the gum. A piece of a visiting card is then taken of the height and length of the plate required for the band, or the pattern may be cut in thick lead foil; the plate is then adapted to the tooth. Having fitted the band as well as possible, it is squeezed close with the fingers, so as to spring over the tooth when put on it for trial. The band is trimmed until it follows the contour of the gum, a line or so is left for lapping, the lap being always brought to the outside for convenience in marking and trimming; then the lap is marked, the band removed from the tooth, closed about a line and soldered. Next the band is tried on; if too tight, a few blows with a hammer along the lap will stretch it; should the band upon the inside of the lap need alteration, it is best effected with a round file. The edge of the band which goes under the gum is next chamfered and burnished; after starting the band, it is helped to its correct position by a steel mallet, using a piece of apple wood or bone about five inches long, checkered on the end to prevent slipping. The band is then carefully studied to see the proper height to be left, and if needful marked and trimmed with contour pliers. After contouring, the band is held with its top edge against the flat side of a corundum wheel on the lathe, and the band is rotated and so a flat surface is secured.

To produce the top, an extracted tooth is taken, or a model from an impression of a natural tooth, and the roots and crown are invested in plaster almost to the grinding surface, leaving the block about two inches high. This is trimmed, leaving a base about one inch square. Squaring and chamfering the corners leaves the best shape for withdrawing from the mould. The block's face is made flat, and left 1-16th inch wide, to act as a guide in the finished die, assisting the operator to utilize his gold when stamping the top. The model being made, a mould, preferably of marble dust,

is made. No counter die is needed for producing the tops, the gold to be stamped is placed on a piece of lead, tinfoil being interposed to avoid after-sweating during soldering. After swaging the top, the narrow flat margin is utilised to hold it during soldering. The top is then flushed with a 20-carat solder. The flat edge of the band is then touched with a piece of borax and returned to the flame, when the top and the band will unite satisfactorily. The surplus plate is trimmed off with shears and the overhanging edges ground off to the required contour and polished as a gold plate, except that it is not stoned down. Experience teaches no special provision for surplus cement is needed. The best cements are the Richmond Crown Cement and Welch's Crown Cement. The cement is to be just so thick as to drop from the spatula, the cap is filled with it, and as it is driven home the excess escapes round the neck of the tooth. The method suggested enables the operator to prepare a mouth, make and adjust a crown in one hour and a-half, and is both simple and easy to apply.

The CHAIRMAN in opening the discussion read a communication from Mr. Morton Smale who was unable to attend the meeting through illness. Models were exhibited of typical cases, in which metal cap crowning seemed indicated. In one case, a bicuspid in a lady's mouth, a porcelain facing was used; in the other (a molar), a simple hollow gold crown was applied. Both cases were fixed with gutta percha. Mr. Smale regarded crowning as a valuable addition to methods of treatment. He instanced a case of a public man who had applied to him. Four lower incisors was broken down, and as he had to speak the next day, Mr. Smale decided to fit teeth with a good cap behind each one, and this manœuvre answered admirably.

Mr. WALTER H. COFFIN asked whether there was any special method for removing the crown after having driven the band home; he had experienced some difficulty in preserving the shape of softish gold when removing it.

Mr. HENRI WEISS obviated the pain and bleeding of the gums which resulted when a small piece of gold was used, by the following method: A strip of gold at least two inches long is taken, and its extremities held with an ordinary pin vice. A lap of gold is obtained, which could be placed over the root and there held firmly. The lateral portions are burnished and the crown forced up the root with the finger and thumb.

Dr. ST. GEORGE ELLIOT thought most dentists would find one and a-half hours inadequate to preparing and adjusting a metal cap crown. He preferred his own method which was to prepare the roots as rapidly as possible, take an impression at once, cast in spence metal. He then took the model, tried it in the mouth and placed a cap on the top which had been swaged. He filled the cap with wax, and at a subsequent sitting fixed it.

Mr. WILLOUGHBY WEISS wished to emphasise the importance of using coin gold in making metal crown caps, and of filling the crown with some base to prevent indentation.

Mr. DENNANT desired to know whether Mr. Mitchell meant that the plastics he had named were the best ; he, Mr. Dennant had had Flagg's cement highly commended.

Mr. GEORGE CUNNINGHAM deprecated having cements called by maker's names rather than by a descriptive appellation. There was the objection of unsightliness against the all gold crown. A Parisian dentist obviated soldering the band by melting the gold, using compressed air, and uniting the ends of the band directly together. Dr. Cunningham then described his method of applying porcelain fronts. He made a ring ferule which would surround the tooth from the contouring and letting in the porcelain front to the gold band, this last being very narrow in front, did not show much. For adjusting the articulation he used a Howe screw, and if necessary deflecting, then filling up with amalgam.

Mr. WALTER COFFIN cited a case where a patient had come to him asking for a window to be cut in a gold crown to avoid unsightliness, and he had applied a porcelain front.

Mr. Stocken having broken a porcelain front had counter sunk the crown and accurately fitted a porcelain front to it.

Mr. KIRBY made some remarks upon porcelain fronts ; he used a split ring round the tooth, filling up with amalgam.

Mr. BETTS remarking upon the filling materials used in preparing roots for metal crowns, had once had a tooth filled with Portland cement which had answered admirably.

Messrs. Vincent Cotterell and Boyd Wallis had had experience of Portland cement and spoke favourably of it.

Mr. HENRI WEISS had found that with porcelain fronts it was never possible to make a water-tight filling. Moisture always got between the porcelain front and the gold collar.

Mr. LEONARD MATHESON believed that if, after the collar had been fitted, a cap was made and the crown then fitted to it, no water would get in.

Mr. MITCHELL having briefly replied, the Chairman announced that the following meeting would be held on the second Monday in January, and would be devoted to the election of officers and casual communications.

The Annual Dinner of the Staff and Past and Present Students of the Dental Hospital of London.

THIS meeting is rapidly assuming an importance in the eyes of the profession which was never contemplated when it was first inaugurated ten years ago. It was then a social gathering of the staff and students and a few friends, it has developed to a very considerable meeting of the profession, at which important things are said upon great professional questions. The attendance on the present occasion (the 1st of this month) was larger than ever. The popularity of the chairman brought many distinguished guests to support him, amongst whom were Mr. Hulke, Mr. Christopher Heath, Dr. Curnow, Dr. A. Pearce Gould, Mr. Trimmer, Mr. Hallett; and among the old familiar faces were those of Mr. Thomas Underwood, Alderman Rymer, Mr. Alfred Hill, Mr. Weiss, and others.

The musical programme was principally performed by students past and present, under the direction of Mr. David Hepburn. The usual loyal and patriotic toasts having been proposed from the chair and duly honoured,

The CHAIRMAN, who on rising was greeted with prolonged cheers, proposed "The Past and Present Students." He said:—

Gentlemen,—This is a toast which is increasing yearly in importance, for as a matter of course, year by year the number of past students increases, and although not as a matter of course, yet as a matter of fact year by year the number of present students increases; for ever since dentistry was established as a profession, and ever since a curriculum has been formulated which can call forth the intelligence, the perseverance, endurance and manipulative skill of the student; ever since it has been made manifest that the profession of a dentist is one which may be followed by gentlemen in an honourable way, that it is a profession in which both art and science may be combined to mitigate the sufferings of humanity, enhance the happiness of humanity and prolong human life—ever since these things have been recognised the number of students has increased.

It is not yet ten years since the life-long labours of Mr., now Sir John, Tomes (cheers) and his colleagues culminated in the passing of the Dental Act. The gentlemen who worked with him are many of them spared to us yet, but I regret to say that neither Sir John Tomes, Sir Edwin Saunders, Mr. Parkinson, nor Mr. Cartwright are here to-night; they are prevented by circumstances which will overtake all of us if we live long enough, it is only in the course of natural events that we miss them from the festive board, but we miss them none the less. But I see here to-night our esteemed friends Mr. Underwood, Mr. Hill, Mr. Weiss, and last, though by no means least, we see here that old stirrer-up of Dental Reform, Mr. Alderman Rymer.

Well, gentlemen, I would recall to you the fact that throughout a lifetime many of these men worked with one object in view, and that was the elevation of their profession, and they had a steady and clear notion of how that object was to be obtained; they saw clearly that it was not to be obtained by any process of exclusion—not by building a ring fence round the profession—but that it could only be secured by solid education. It was this clear purpose kept ever before them that enabled them to wait until the dentists recognised the fact, and it was this same purpose that enabled them to receive with pleasure that impetus from without which is necessary to action, and that manifestation of feeling soon took the shape of a Dental Reform Committee. Well, I believe if it had not been for the labours of the pioneers in dental reform through a period of more than a quarter of a century, it would have been almost impossible for the Dental Reform Committee—with which the name of Charles James Fox is indelibly associated—to have been constituted, and if such a committee had been constituted without such preliminary labours, it would have been no further on the road to-day than it was then. The Dental Reform Committee has done much for us and brought many noble men to the front, but we must not forget upon whose labours the success of that Committee was built up. We must also remember that the same guiding spirit who had led the profession through a twenty-five years of scientific education and progress to this stage took the helm of affairs at this critical period of our history, and I do not think I shall trespass against the canons of good taste when I say that the first draft of the Dentists' Bill—the foundation-stone, as it were, of dental reform—was drafted under the supervision of Sir John Tomes, and I think I may go further and say

that it was at the instance of Sir John Tames that Sir John Lubbock—that prince of conductors of private bills—undertook the introduction to, and piloting through, Parliament of the Dental Bill. He undertook this task in the conscientious belief that it was desirable for the welfare of the public and of the profession, and executed it so judiciously that ere the Bill had long been before Parliament, it was changed from a private to a public one, and as a public measure it passed through both Houses and received the Royal Assent in one session—a circumstance, I believe, almost unique in Parliamentary history. Well, gentlemen, this Act has been viewed variously, and it has been criticised variously; I am not going to stop now to answer those criticisms. I think they have been answered again and again; but whatever this Bill has done and whatever it has failed to do, it has done one thing, it has given you a distinct title as a dentist, for no sooner have you acquired your diploma and registered it at the office of the Registrar than you are marked as men who have passed a special education for a special purpose, who have gone through the preliminary examination in arts precisely the same as is gone through by the medical student, and who have gone through an expensive curriculum to qualify yourselves for the position which you hold.

Now, gentlemen, the title which this Act gives you is that of licentiate in dental surgery; it is not conferred by only one corporation, it is granted by the Royal College of Surgeons in Ireland, the Faculty of Physicians and Surgeons, Glasgow, the Royal College of Surgeons, Edinburgh, and the Royal College of Surgeons, England; all these bodies issue the dental diploma which is known by the abbreviated title of “L.D.S.” Well, gentlemen, in framing such a measure as this, it was necessary to consider vested interests. You know the Houses of Parliament are very jealous of vested interests, and when we proposed to establish a Dental Register it was necessary to consider those vested interests which existed in many quarters. There were many gentlemen who were well seated in public estimation and well advanced in years; these gentlemen thought it *infra dig.* that they should present themselves for examination and theirs was certainly a case for which special provision should be made. Then there came the “Mundella Clause” which claimed consideration for apprentices who were apprenticed before the passing of the Act. This clause has no doubt been much abused, but I cannot regret that it was put into the Bill because I think that it was better we should suffer a few abuses than that we should per-

petrate one injustice. Then there came a motley group of people who made claim to have practised dentistry before the passing of the Act, in a form known, perhaps, to none but themselves. These men, under a clause of the Act and by the exercise of the judgment of certain gentlemen on the Medical Council, were allowed to come on to the Register; it proved to be very damaging to the dentist but we had to tolerate it in the spirit of suffering many wrongs rather than perpetrate one injustice, which is the true spirit of English law. Well, gentlemen, with all these disadvantages we come back to the point that the Act has given you a title, the L.D.S., and this qualification is unalterable and distinguishes you from all others on the Register. This education, this examination, and this registration enables us to come before the public with a very strong case indeed. If you consider for a moment the Royal College of Surgeons—and when I speak of it, I would speak so practically of the other corporate bodies I have named, only for brevity's sake I take that college with which we are more intimately acquainted—well, gentlemen, if you look at the examining board of the Royal College of Surgeons, you will see that it is composed of gentlemen who are selected from every part of the country, because of their eminence as teachers or as practitioners, or both; and from this body one half of the Dental Board of Examiners is chosen. The chairman of the Dental Board is also chosen from the same body; these gentlemen examine in anatomy and surgery. The other half of the Board is chosen from amongst dentists who are eminent as scholars and practitioners, and so jealously are the students kept apart from the examiners that on being appointed examiner, the acceptor is expected to give up any appointment he may hold as a teacher. Then again, as to registration, if you look at the medical council of education you will see that it is composed of men from all parts of the kingdom—some of its members are elected by the medical profession, the Universities and colleges send their representatives, and the Privy Council sends its representatives. Now the Medical Council has undertaken the supervision and administration of the Dentists Act, just as it has undertaken the administration of the Medical Acts, and it is to this Council that the student has to go to register himself when he has taken his certificate in Arts. It is also to this Council that the student has to go to register himself when he is qualified, and it is then that he can take the proud title of L.D.S. Well, gentlemen, with the two institutions I have cited to appeal to—and I think it

would be hard to find a higher tribunal than this as professional men, certifying to our having fulfilled a curriculum and to our fitness to practise by examination and registration—it is not unreasonable to say that, after a curriculum which extends over five years, we are fully entitled to professional consideration. The position we took up was not one of assumption of authority by a few of our own body. We did not attempt to make a close borough of our profession, and to aggrandise ourselves at the expense of the public. It was no recognition of ourselves by ourselves only, but an honest offer of a body of men to give a professional education in return for professional recognition. Now it seems to me that a man who has conscientiously worked up the curriculum which is placed before us as dental students, must be a man who has not only a considerable amount of intelligence, but who is capable of taking his position in the hierarchy of educated gentlemen, and I cannot believe that any medical man would begrudge a Licentiate in Dental Surgery his due position: I cannot believe the stories which I hear of men holding the L.D.S. having been pooh-poohed and cold-shouldered by the medical profession—I cannot believe that any member of the medical profession would stoop to such a thing. If such a thing should happen it must be *in despite of* the diploma, and not on account of it. We know that the medical profession is very jealous of its honour, and rightly so too, and they do not hesitate to visit with their displeasure any member of their own body, however talented or able he may be, who transgresses the unwritten code of honour—even now the air is full of their displeasure with some of their members. If we aspire to be regarded as professional men and to be recognised by the medical profession, we must be content to submit to the same wholesome discipline. The medical diploma will not do everything for the medical man. If it could we would not hear the harrowing tales of fully qualified men prescribing and dispensing for patients at the price of a few pence per head, and barely able to keep body and soul together. So in the same way the dental diploma will not do everything; and you must always bear in mind that—if you do not comport yourselves as professional men, if you do not live up to the professional spirit which has been inculcated in you during the time of your studentship, your diploma will do very little for you. Your diploma is your passport to consideration, but the amount of toleration and consideration you receive will be measured by a far different standard; your diploma is your opportunity, and it is for you to make or mar it.

Now when the Act was passed it was immediately assaulted by the hydra-headed monster quackery ; the first assault was made on the L.D.S. ; these gentlemen were wiser than the children of light, they at once saw the importance and the effect of that qualification quicker than many of our reputable practitioners, and they made haste to assume it on spurious grounds. One or two prosecutions were made by the British Dental Association, and I am pleased to say they stopped it. Then we were assaulted by a number of men who openly and rudely disregarded the provisions of the Dentists Act ; the proceedings of these men have been modified in some instances, and stopped in others, and I believe they will be still further modified as legal precedents accumulate. Now, however, we are brought face to face with another class of pretenders or charlatans—men who are untrammelled by scruples of conscience or considerations of professional honour, and who devote their ingenuity to the evasion of the Act ; and I need hardly say that the public are their victims, whether from a willingness to be cheated by specious promises, or from ignorance of those facts I have above stated, I do not know, but in the majority of cases I believe that it is from a notion that they can have an advantage over the legitimate practitioner in some way or another. These sharp-witted people like a lot for their money, and I doubt not but that they get it, though the lot may ultimately prove a hard one. Amongst other things, such people like to be served by men with high-sounding titles—hence we find that the ambiguous term “doctor,” is a favourite one with the quack. It is a term which has no well-defined legal definition, and like professor is common property. These gentlemen at first used the term “doctor of dental surgery,” but they had to drop the dental surgery, and now they are doctors from some city in America, in which there exists a dental school or college issuing diplomas.

In this country when a person practising any branch of the healing art assumes the title doctor, he is credited with having acquired by curriculum and examination a registrable degree. Yet these are reputable dental practitioners—men whose character is unimpeachable, some of whom I have the pleasure to number amongst my personal friends—who use it without regard to this accepted meaning, much to the embarrassment of their colleagues, to the bewilderment of the public, and to the advantage of the charlatan who is always ready to profit by any advantage which may present itself enabling him to imitate respectability. Many of

these irregular practitioners are enabled to carry on their practices under the protection of men whose names are on our Register, and under their ægis they make a decoy of American dentistry. Now we have men all over the country advertising this so-called American dentistry. Some of these men have never been within less than 3,000 miles of the American coast; others have made a rush across the Atlantic, and after a short residence of a month or two secured a diploma of some kind from one of those schools or colleges which every respectable American dentist would gladly see wiped off the face of the earth, while others, I regret to say, have diplomas from respectable institutions which were given them for a far different purpose. We have American gentlemen who have come amongst us as our colleagues, and with whom it is a pleasure and an honour to associate. They practise with acceptance by the public, they join our scientific societies and discuss intricate points in practice, and vie with the most energetic amongst us in pouring out their stores of knowledge for the benefit of the profession, and as a result for the benefit of the community at large. It is not often that we have the opportunity of speaking publicly, but I think I express the sentiments of every dentist in this room when I say that we heartily sympathise with them in the shame and indignation which they feel at the degradation of their country and profession by the class of men to whom I have been alluding.

Well, gentlemen, it seems to me that we shall have the quack, as we have the poor, always with us; but we must be patient and remember that education, skill and integrity are valuable possessions and will tell ultimately in favour of their possessors. I know that the resources of the law are not yet exhausted, and those who have read the proceedings of the Medical Council this week may see that events are tending steadily in our favour and may take heart of grace. I also know that if you drive these men from one position they will take up another, and that there is always a large number of people who can only arrive at the truth through painful experience. I therefore think it is our duty, in the meantime, to enlighten the public so far as we can as to the true meaning and importance of the Dentists' Register, and what is perhaps more difficult in men possessed by that modesty which is the outcome of self-respect, the title of L.D.S.—the title of which we are all so proud, and which we mean to raise to a position of still greater honour and esteem.

Well, gentlemen, I think I have taken up more time than I should have done ; I did not know it was possible to have got so far away from the toast which I have to propose to you, and which was the object of my rising ; but, as it is said that "All roads lead to Rome," so with some people all dental toasts and dental subjects lead to dental reform and dental education. I come back to the past and present Students : I congratulate them sincerely upon the very excellent accommodation that has been provided for them, and also upon the very excellent staff under which they have to work ; I congratulate them too upon their spirit and independence and the self-reliance which they have shown in their recreation ; the profession of their choice is an arduous one, and I am glad to see them throwing themselves heartily into those manly sports which will give them the endurance required for the fatigue of the operating room. The students' athletic club, cricket club, lawn tennis club, rowing club and football club are doing well—I believe you have been doing exceedingly well in your football club. I congratulate you also most sincerely upon the excellent work of your Students' Society ; and I must congratulate the present and immediate past students, not only of the London Dental Hospital, but of every dental school in the kingdom, upon one fact which we may contemplate at a distance—we who have been long marching in the van, find our marching powers are becoming very much impaired, we cannot expect to see the fruition of our labours, "One man must sow another must reap"—I may congratulate you, gentlemen, upon the grand harvest that is in store for you, and that is the time when the Dentists' Register shall contain only the names of those who have taken the L.D.S. ; then will the Dentists' Register fulfil the object of its institution, and then will you perhaps look back and think of the wisdom of the men who provided it. With the past students I have to associate the name of my friend Mr. Ashley Gibbings, who will speak for himself shortly. With the present students I associate the name of Mr. Dolamore ; this gentleman, I believe, has been distinguished not only at the general hospital but also at our special hospital by the clever manner in which he has prevented other people getting prizes, but evidently by the way in which you received his name it has not diminished his popularity. Gentlemen, coupled with these two names I give you the health of the past and present students.

MR. ASHLEY GIBBINGS and Mr. W. H. DOLAMORE having replied on behalf of the past and present students,

Mr. A. PEARCE GOULD proposed "The Dental Hospital of London and Staff," and said: I imagine, sir, I am right when I say that the establishment of the Dental Hospital of London thirty years ago was the commencement of dental progress; that the establishment of that hospital has done more than anything else to raise dentistry to the dignity of a profession, and for that not only we, who are more or less intimately associated with the dental profession, should be thankful, but the public should also be thankful, and therefore we and everyone, both inside and out, wish prosperity to the hospital. And happily it is not a wish only; the Dental Hospital is almost the only hospital whose funds increase from year to year; they are never in debt, they are never in want; a generous public pour money into their coffers; they add a new ward or a new wing and it is already paid for. Well then, sir, patients at this hospital have an extraordinary way of multiplying; a year ago it was an extraordinary thing to have 40,000 patients passing through the hospital, now, I believe, they have 50,000; indeed, it seems to me that this is the only hospital able to keep pace with the enormous growth of the metropolis. This is a matter for congratulation when it is remembered that there are other institutions springing up which might be expected to draw off from this hospital a large number of its applicants, and it seems to me that it must be more important for this hospital to have a large number of patients, for, as I understand it, the students here do not merely watch their teachers, as they do at other hospitals, but each individual student performs his own operation and that renders it exceedingly important that, with an increasing number of students, you should also have an increasing number of patients. I have only to say in conclusion, that I have been requested to couple with the toast the name of one of the surgeons of the hospital, Mr. Frederick Canton, and I have much pleasure in doing so.

Mr. FREDERICK CANTON, responding, said: Mr. Chairman and Gentlemen, in spite of Mr. Pearce Gould's very flattering remarks, I am sorry to say that the Dental Hospital of London is at the present time in debt, chiefly incurred by the enlargement of the building, but if we are poor in funds I am glad to say we are rich in students, and not only are we rich in quantity but also in quality, for our students distinguish themselves year by year not only at our own hospital but also at the general hospitals.

The enlargement of the building was necessitated by the increas-

ing number of patients, and owing to the cordial feeling existing between the Managing Council and the Executive Council we have been able to make the needed extension ; I hope this feeling will always exist between the two Councils. The hospital has the honour as it has the interests of all its students at heart, and endeavours to give them every facility for obtaining a thorough knowledge of the profession they have chosen to follow. When a student is ready to qualify, he presents himself for examination at one of the Royal Colleges, pays the fee, and gets his diploma. It appears to me that when the Colleges have issued the licences they seem to think that there their responsibility ends, and they do not practically do anything to uphold the integrity of the licence they have granted. The Royal College of Surgeons in Ireland has done what it can ; the College in Scotland I do not think is troubled much with black sheep ; the Royal College of Surgeons, England, seems to be content to say that it has no power. It is desirable that these royal and important bodies should obtain that power which they most assuredly ought to possess, and I hope and believe the day is not far distant when they will have those powers ; I trust that when they get them they will not neglect to use them.

Mr. E. TRIMMER, in felicitous terms, proposed "the London and other Dental Schools of Surgery," and in doing so adverted to the absence of the Dean owing to sudden illness, remarking that all would agree that there were few men to whom the School was more indebted than to Mr. Morton Smale. In conclusion, he begged to associate the names of Mr. Arthur Underwood and Dr. Stack of Dublin with the toast.

Mr. ARTHUR UNDERWOOD, after having referred to the deep regret which he was sure would be felt by everyone at the absence of Mr. Morton Smale, and specially because illness was the cause of that absence, said that there were other schools besides those of London, that they were all working in the same direction—the Schools of Edinburgh, Dublin and America were all working for the same good ends, namely, the abolition of improper practices and quackery.

Dr. STACK said : It is quite true that the school in Dublin is a small one, but I am happy to say that it is growing both in students and in the attendance of patients, and growing also in the important way in which it is eliciting the sympathy of many of the teaching bodies. As Mr. Canton very kindly mentioned—and I think it is a very important thing to men-

tion—the Irish College has exacted from every student to whom they have given their diploma, a solemn pledge that so long as they hold it they will not advertise, and they have not only done this, but they have on several occasions already deprived those who have forgotten these obligations of their diploma. Referring to the need for better premises for the Dublin Dental School, I must say that the Royal College of Surgeons, Ireland, is most kind in the way in which it lends us the use of its rooms; the other generous rival of the Royal College is the University of Dublin, which has a very fine medical school, and I am happy to say that within the last couple of months we have concluded an agreement to take a house from the University of Dublin on their grounds, and we are about to extend it. I thank you, gentlemen, for the very kind manner in which this toast has been received.

Mr. CHRISTOPHER HEATH in a few appropriate sentences proposed "The Visitors," coupling with the toast the name of Mr. F. G. Hallett, who briefly responded.

Mr. S. W. SIBLEY in proposing "the health of the Chairman," whose name was received with loud applause, warmly eulogized the great services he had rendered to the profession and to the cause of dental education and reform. His success had been greatly due to his untiring energy and perseverance. Mr. Smith Turner had always been ready to work when there was work to be done, and he had done it ungrudgingly and with good success. He would say Mr. Turner's chief characteristics were his indomitable good nature and cheerfulness—it was easy to be cheerful and to carry on a good work when things went smoothly, but it was not given to all men to be so when things did not go smoothly, and these were the qualities which largely belonged to their chairman. Turning for a moment to business matters, he was a little shocked when Mr. Pearce Gould said that their hospital was in a flourishing condition. He could assure them that it was very poor and very much in need of funds, and for the funds it did possess it was largely indebted to members of the dental and medical professions. He would not detain them any longer but would ask them to do two things; first to drink the health of their excellent chairman, and secondly to do so with musical honours to the best of their ability.

Mr. JAMES SMITH TURNER briefly and cordially returned thanks.

Edinburgh Dental Students' Society.

THE fourth session of this Society was opened on November 5th, at the Dental Hospital. Mr. David Monroe, L.D.S., President, in the chair.

The inaugural address was given by Mr. George W. Watson, L.D.S., one of the Hon. Presidents, who gave a very interesting account of dentistry from prehistoric times down to the present date, giving descriptions of dental operations as performed by the Egyptians and Indians, and quoting at length from Celsus, Galen and other writers of antiquity, mentioning the artificial dentures found amongst the Egyptian mummies and the bas-reliefs of India.

By means of advertisements taken from the last century and the beginning of this, he contrasted the professions and status of dentists of those times with the modern dental surgeons; and concluded his address by giving a few words of advice and encouragement to the Students, exhorting them to take full advantage of the facilities at present existing for the acquirement of a thorough dental education, and to follow in the footsteps of their leaders by devoting their spare time to original research.

Mr. HUGH JAMIESON then gave a most instructive and exhaustive paper on "Chloroform," tracing the history of anæsthesia from the labours of Wells, and alluding to the introduction of chloroform by Sir James Simpson in 1847. He also described its physical and poisonous properties, its mode of administration and its dangers, with the precautions to be taken.

The meeting closed after a vote of thanks had been given to Mr. Watson and Mr. Jamieson.

THE second meeting of the Society was held on December 3rd. Mr. D. Monroe, L.D.S., President, in the chair.

The minutes of the last meeting were read by the Secretary (Mr. A. E. Donagan, B.A.) and were adopted.

Mr. A. K. BRITTAN then read a most interesting paper on "Dental Education" which elicited a very spirited discussion in which all the members present took part. He maintained that prosthetic dentistry has been and will continue to be of great importance; he advocated the forming of a practical mechanical department in the various dental schools, where an opportunity might be had of becoming thoroughly familiar with all the dif-

ferent kinds of mechanical work, and where also the students' proficiency might be tested.

The meeting dissolved after a hearty vote of thanks had been given to the reader of the paper.

ANNOTATIONS.

THE Publishing Committee have decided to issue, in pamphlet form, the letter which appeared in our November number on "Quackery." A very considerable demand has been made by Members of the Association for copies of the Journal containing the letter, and as it has not been possible to comply with this demand, the Committee have decided to republish the letter with the author's consent. In order to regulate the distribution of the pamphlet, there will be a nominal charge of 3d. per dozen, and copies may be obtained by application to Messrs. John Bale & Sons, 87, Great Titchfield Street, W. A large number of our readers who are often at a loss to put clearly the case of quackery, may find what they fain would say neatly said in the letter, and can present it to their patients in lieu of an explanation.

A VERY successful smoking concert took place on November 28th, at the Old Hummums Hotel, Covent Garden, under the auspices of the Students' Society of the National Dental Hospital. The chair was taken by Dr. Maughan, who was supported by Mr. Sydney Stokes in the vice-chair. A varied and entertaining programme afforded much amusement to the staff, students and friends of the Institution, tending to cement that good feeling which can exist between the teacher and his pupils.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.—The following candidates passed the first Professional Examination for the L.D.S. of the college, in October last, and were accidentally omitted from the list of successful candidates published at the time:—Charles William Stuart Wilde, Liverpool; Alfred Elliott Smith, Norwich; and John Edwin Husbands, Bristol.

THE Annual General Meeting of the Odontological Society will be held on Jan. 14th, 1889. Agenda:—Election of officers and

council for ensuing year ; reception of reports from treasurer, librarian and curator. Casual communications by Wm. Hern, M.R.C.S., L.D.S., and Boyd Wallis, L.D.S.Eng.

We publish in this issue a letter from Dr. Stack, of Dublin, in which he explains the case of the Dublin Museum Committee. Of course some accidents will happen in the best regulated families, but it is sincerely to be hoped that no substantial damage has come to any of the exhibitors' property.

CORRESPONDENCE.

We do not hold ourselves responsible for the views expressed by our Correspondents.

Death from Erysipelas and Gangrene after Extraction.

A "GOLDEN CHARIOT" PATIENT.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—On the 26th ult., a death occurred at the Hospital of this city (Auckland), certified by the house-surgeon as follows : "Died from Erysipelas and Gangrene of the Face and Eye after Tooth-extraction." Allow me to give you in brief the circumstances of this miserable case. Some months ago a certain M. and Madame Duflot arrived in this colony, accompanied by a Dr. Rennie. The two former registered on the New Zealand Dental Register under the qualification of "Certificate as Dentists from the University of the Province of Namur;" the latter registered as M.D., in virtue of a diploma from the "Michigan Medical College." By bold and meretricious arts they accomplished here as elsewhere a popular but questionable *coup-d'état*, repeating, I am told, a plan of operations familiar to various localities in the "old country." High salutin advertisements, a gilded tawdry coach (styled "The Golden Chariot") and four, driven through the streets to the strains of a brass band in uniform, loud promises of cures and of painless operations, with startling reports from newspaper "interviewers," create no small stir, and when the said "chariot" halts on a vacancy near the chief thoroughfare, an excited and credulous crowd gather round, who are invited to ascend and be operated upon without pain and without price. Coins of silver are given to children, and occasionally to poor and well-known persons much larger sums. With this parade and pretension, and under this semblance of generosity the Duflots are said to have carried away, in their sudden exit from New Zealand, no less than £30,000, and this in a period of severe depression when thousands of honest people are either leaving the colony to get work elsewhere, or

are at their wits' end to make a bare living. They amassed this wealth by an immense sale of "perfume" and of "powders" and by lusty fees for private consultation and promised cures.

That they effected at least temporary cures in many cases and had acquired dexterity in extraction, there can be no doubt. Crowds besieged the "chariot," railed at doctors and dentists, unconscious of risk in placing themselves at the mercy of itinerant sensational operators, who in a twinkling could whip out a molar or cut off a tumour. But there were some untoward results, fractures of teeth and alveolar processes not a few; two sudden deaths of invalids precipitated by the "Canadian medicine," which in both cases caused violent pain and vomiting.

Among the many who went to the "chariot" to have "teeth" out, was an able-bodied man, named Frank Ryan, aged thirty, whose case cannot be better given than in his own statements to the reporter of a local paper, *The Auckland Evening Star*, and to Dr. Lindsay, the House Surgeon. To these may be added Dr. Lindsay's own statement of Ryan's case after admission to the hospital.

PAINLESS TEETH EXTRACTION.

A GOLDEN CHARIOT PATIENT AT THE HOSPITAL.

His Account of the Operation.

It would appear that the wonderful teeth-extracting process, practised by Dr. and Madame Dufflot, is not always so pleasant as some would have us imagine. Indeed, a case now brought under our notice indicates that the "painless operation" is sometimes not only associated with the customary agony, but with consequences of an alarming nature. A man named Frank Ryan, formerly residing in Abercrombie Street, is now under the care of Dr. Lindsay at the Hospital, suffering from one of the worst attacks of erysipelas it has ever been the lot of a reporter to see there.

Ryan, who is an able-bodied man, thirty years of age, informed our representative that on Friday last he suffered from toothache and on his way home from work he called upon Dr. Dufflot at the Golden Chariot. He states that he did not get on his carriage, and that Dr. Dufflot performed the operation by the light of the carriage lamps. He held his head back, and Dr. Dufflot seized the aching tooth, which was the last molar on the upper jaw. After several severe wrenches, which caused Ryan real agony, the tooth came away. "Almost immediately afterwards," added Ryan, "I felt bad effects. The gum bled considerably, and within an hour I was quite blind. After the tooth was extracted I walked down the wharf, and my face swelled up, while my eyesight went so rapidly that I was hardly able to get home. I sent for Dr. Hooper without delay and was attended by him. He sent me to the Hospital yesterday."

Ryan's condition is an alarming one and his face presents a pitiful sight, one eye and one side of his face being swollen and inflamed beyond recognition. There is a gangrenous condition of the eyelid and cheek, secondary to an acute attack of erysipelas. He is receiving every possible care at the Hospital, and Dr. Lindsay has hopes that the man will be able to pull through.

Our reporter having suggested to Ryan that the tooth extraction was supposed to be painless, the patient mustered up a sickly smile and stated that, five weeks before he was operated on at the Golden Chariot, he had a tooth extracted by Mr. J. Goodwin Cox, dentist, and Dr. Dufлот's operation caused him infinitely more pain than the previous one did.—*From the "Auckland Evening Star," June 29th, 1888.*

PAINLESS TEETH EXTRACTION.

DEATH AT THE HOSPITAL.

A Golden Chariot Patient.

During the time that Madame and Dr. Dufлот were drawing teeth *gratis* at the corner of Customs Street, a man named Frank Ryan went up and was operated upon. Subsequently symptoms of erysipelas set in, and Ryan was removed to the District Hospital. Here he was interviewed by a reporter of this journal, when he stated that the operation had not been as painless as was generally supposed. At that time the House Surgeon said that the patient was in a critical condition but expressed the hope that he would recover. This, however, has proved not to be the case, and Ryan died yesterday.

The matter was reported to the police by the House Surgeon, and Constable Kelly was despatched to inquire into the matter. The deceased was a labourer, aged thirty years. He resided in Abercrombie Street, and was a native of this colony, and is put down as a Roman Catholic.

Ryan's Statement.

The following statement was made to the Resident Surgeon, Dr. Lindsay, by Frank Ryan, on the 6th of July:—"On Friday, the 22nd of June, I had a slight headache in the morning, tooth aching slightly on getting up, and became worse during the day. Was working on the wharf until three o'clock. Had one glass of beer at one o'clock, and was on the wharf from three till five p.m., but not working. At five o'clock I went to the Golden Chariot just as they were leaving. I asked the lady to pull the tooth. She told me to go to the man and he would draw it. He made no objection, and stood on the steps close to the lamp and drew the tooth. It caused me great pain and I went right home again. A man named Conway went home with me. Thomas Howard went with me to the Chariot close on five o'clock, but we saw no chance then of getting the tooth drawn. We then went down the wharf for a stroll, and upon returning I had the tooth drawn. Howard was with me when the tooth was drawn. My face was very sore on going home. It began to swell and my headache got very bad. Could not eat anything but drank a cup of tea. The swelling increased and got very painful. On Saturday morning Dr. Hooper was called, and on Wednesday I was admitted to the Hospital."

The Resident Surgeon's Statement.

Dr. Peter Alexander Lindsay states that the deceased was brought to the Hospital at one p.m., on the 25th June last. He was then suffering from very extensive erysipelas and gangrene of the face and side of the head. He was very weak on his legs, and did not appear to be in full possession of his mental faculties. He was immediately put to bed, and his face washed and dressed and the usual remedies applied. The condition of his face gradually improved, the erysipelas disappearing, and the gangrenous parts separated.

It was then discovered that Ryan's left eye had been destroyed. He appeared to be very much depressed mentally, and he gradually sank into a state of great debility, notwithstanding that his strength was supported with eggs, beef extracts and alcoholic stimulants. He was under Dr. Bond's care in the Hospital.

Ryan was moved to the Hospital on the recommendation of Dr. Hooper.



From a photograph taken three weeks after admission to Hospital for erysipelas and gangrene of the face and eye after tooth extraction.

Cause of Death.

Dr. Lindsay can give a certificate of the cause of death, which was erysipelas and gangrene of face and eye after teeth extraction.

Information of the occurrence was forwarded by Inspector Broham to the Coroner, Dr. Philson, who returned the report with the following memo. attached: "Under the circumstances, I am of opinion that an inquest is not necessary."—*From the "Auckland Evening Star," July 27th, 1888.*

The above certificate implies some connection between the death and the tooth extraction. What was it? Had Ryan survived, this question would have been judicially investigated, for he had expressed

his intention of bringing an action against Dufлот ; or had there been an inquest, the history of the case would have been fully discussed. Erysipelas is a blood-poisoning that in an abnormal systemic condition may be developed by a comparatively slight circumstance—by cold, by accident, by abrasion or wound of almost any description ; or by the direct introduction of septic or other poisonous matter. M. Dufлот would explain the after-effects in this case by suggesting that after the operation Ryan went down to the wharf and took drink, or that he “poked his dirty fingers into the wound,” or by smoking. Ryan denied all this ; affirmed that when he went to the “chariot” he was and had been in good health, and that some five weeks before he had had a tooth extracted (by my son) without any after ill-effects, and with infinitely less pain than he suffered from Dufлот.

Now when it is admitted that the dental instruments used at the “chariot” were not systematically cleaned, and if report be true, not always or frequently wiped after use, the question will intrude, whether the subsequent fatal sufferings might not arise or be developed by the introduction of septic matter from the jaw of a neglected forceps, or from the dirty claw of a dentist’s “Key?”

It is believed there had been serious maxillary fracture but to what extent could not be ascertained, owing to the terrible condition of the face. I forward with this a photograph of Ryan taken some three weeks after his admission to the hospital and when the inflammatory symptoms had considerably subsided. Happily such a case is as rare as it is sad.

I believe Mr. F. Weiss has recorded a somewhat similar case, and if any of our readers have seen or known such, will they please communicate ; also any information respecting “the Golden (or as more truly styled the Brazen) Chariot.” It is of course high time that the New Zealand Dentists Act were so amended as to make such a revolting exhibition impossible.

Your faithfully,

*Auckland, New Zealand,
August 11th, 1888.*

EDWIN COX, L.D.S.Eng.

The Annual Museum.

TO THE EDITOR OF THE “JOURNAL OF THE BRITISH DENTAL ASSOCIATION.”

DEAR SIR,—As there has been some delay and considerable difficulty in redistributing the contents of the late Annual Museum, and as some of the contributors to the Museum seem to consider the delay unwarrantable, I have determined to ask you to insert a short explanatory letter about this matter.

Immediately after the Annual meeting the Secretary of the Museum, Dr. Baker, went on his holidays. Before going, however, he had those specimens which had been urgently asked for, laid out, and paid a deputy for packing them. I regret to say that in Dr. Baker’s absence sufficient care does not seem to have been exercised in this packing, and in his absence and that of Mr. Pearsall, I took upon myself the responsibility of ordering that no more specimens should be sent off until Dr. Baker’s return.

When Dr. Baker came back we found that many of the lists of specimens and their owners were in Mr. Pearsall’s possession. Unfortunately for us, and still more so for our over-worked secretary, the latter was laid up in England with serious illness for over two months,

so that it was impossible for us to have his assistance till early in November.

Shortly after his return several of us met together, and classified and arranged the contents of the Museum under the headings of "Contributors."

When this was done we sent off their specimens to those contributors who had already asked for them.

We would have sent to all but that many of the contributors have authorised us to keep their specimens, and these we will put into our permanent museum with the name of the donor attached.

In the bustle of the Annual meeting, it was not possible to take an accurate note of all those who gave verbal permission to us to retain their contributions wholly or in part.

I would, therefore, ask you, Sir, to put in the Journal a prominent notice that the specimens are all ready for sending off to those who apply for them. Application should be made to Dr. Baker, 18, Lower Fitzwilliam Street, Dublin.

Believe me, dear Sir, very truly yours,

R. THEODORE STACK.

10, Westland Row, Dublin, Dec. 7, 1888.

Dental Quackery and American Dentistry.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—It is gratifying to me to learn that my letter on the above subject has so far received the approval of the Association, that it has been decided to reprint the letter as a pamphlet for general circulation. Perhaps you will kindly give me space for expression of my views regarding the uses which may be made of the forthcoming pamphlet, and of other similar reprints from the Journal, which I hope may in time follow this. We have one weapon—the Dentists Act—with which we already have struck some heavy blows at quackery, and with which in the near future we shall assuredly inflict others as heavy. The wielding of this weapon must be left to our Executive. Another weapon will be found in publicity, and this to be effectual will need the co-operation of all our members. It must be carried out on a large scale, but by no means on so large a scale as is necessary to quacks. Quacks are obliged to constantly advertise in the newspapers and to issue pamphlets by the thousand, and it probably needs many advertisements to attract a single patient. It cannot be supposed that when a quack distributes a few thousand pamphlets indiscriminately by post, more than a small percentage obtain any attention from their recipients. On the other hand we may make sure that every counterblast we issue shall strike home. If a majority of our present members, say 700 or 800, would each undertake the gradual distribution of only 100 copies of my letter—I hope to give away 500 within six months—we should, in my opinion, put on their guard against quackery numbers of individuals who, for lack of a hint of danger, might otherwise fall easy victims to the lures of fraudulent advertisers. Daily I am asked questions on the subject of quackery by one or other patient; some want to know whether there is "anything in" this, that, or the other pretension of the quacks, and more often I am told a story of extortion or injury suffered by patients or their friends. In all such cases in future, instead of fatiguing myself with a long verbal explanation, I hope to be able to hand such indi-

viduals a copy of the pamphlet, with the earnest request that they will not destroy it but pass it on to others who may be interested in the subject. This is a course which could not well be taken if the pamphlet bore the author's name; but we one and all can, if asked, state that the author is a member of our Association, who for evident reasons will remain unknown.

A supply of the pamphlet might also be kept in a conspicuous position in professional reception rooms, and copies could be given to patients who might, as many surely would, ask for them. Copies might be given to public men, such as journalists, on occasion. Other directions in which effectual use might be made, not only of this pamphlet, but of suitable numbers of the Journal, will appear evident to members. I trust my suggestions may meet with approval and acceptance. I believe I am fully warranted in expressing my confident opinion that if the Association, through its individual members, will aid in carrying on the war against the enemies of our profession, we shall, and speedily too, leave for dental quackery a narrowed field with no victims except in the crassly ignorant or gullible residuum of the public, whom no reasoning can ever enlighten, and whom no laws however paternal will ever effectually protect against falsehood and fraud.

I remain,

Your obedient servant,

THE WRITER OF THE LETTER.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—Having written previously in your pages on the above subject, I learn that there is an idea about, that I wrote the letter which appeared in your last issue. I beg to state that this is not the case.

Yours truly,

FIAT LUX.

Failures.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

SIR,—There are one or two points in Mr. Dennant's paper on "Failures" to which I would like to draw attention.

One of the failures he mentions as most common is the irritation that is often caused to a pulp by a filling, and this he thinks is caused by the use of the spoon-shaped excavator wounding the pulp microscopically. Now I think the causes of failure in this class are: First, not destroying an aching pulp because it is not exposed; Second, placing the stopping so close to a healthy pulp that all thermal changes are perceived. As to the first: a pulp that has ached much becomes more or less disorganised, therefore it should be destroyed, as the efficacy of conservative treatment is very questionable. It may be thought rank heresy to advocate the exposure and destruction of a pulp, but I may say that, while I have often regretted not doing so, I have never yet regretted having done so.

As to the second, well, capsicum bags or plaisters are usually employed for the relief of this, but it will be found of much greater service to place a piece of gutta-percha under the stopping. And here some one will say it is wrong to put gutta-percha under a hard filling because it is just like a cushion and in condensing it gives. This objection of course holds good if a low temperature gutter-percha

is used but I always use a hard or high temperature gutta-percha, Jacob's.

Another objection is that in shallow cavities as mesial or distal bicuspid, when the gutta-percha is placed in position the shape of the cavity for holding an amalgam is somewhat interfered with, but of course it is necessary to bear this in mind and prepare accordingly.

Mr. Dennant also says: that "in the treatment of a tooth, a dead nerve is often difficult to extirpate completely when there is an awkward curvature of root," and further on says he has used in about a dozen cases an iodoform preparation of Mr. Denison Pedley's for filling pulp chambers and roots in such cases, and desires an opinion as to its merits. But he speaks of it as a dressing instead of a permanent root filling. As such I have used it for about three years with very good results, not only in cases where I have devitalized and had difficulty in removing all the pulp, but also as a filling for roots and pulp chambers (or chambers only in difficult cases) for dead (abscessed) teeth. In fact, I have used it more for dead teeth, and I now never despair if I am unable to remove the whole of a decomposed pulp. I am sure that in using this iodoform preparation he will overcome one of his "Failures."

Yours truly, C. C.

London, S.E.

1st December, 1888.

Ninth International Medical Congress.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—The Transactions have now been published and are now in the hands of most of those who are entitled to them. If, however, some of our *confrères* have not received them, and as they do not know to whom they should apply, the following information may be of use. The printers and publishers are Messrs. W. F. Fell & Co., 1220, Sansom Street, Philadelphia, while Mr. W. Wesley, 28, Essex Street, Strand, London, is acting as the Agent for the distribution of the volumes in this country.

The Transactions consist of five handsome volumes of nearly 800 pp., well printed and illustrated by numerous plates, maps, woodcuts, and tables. Some of the lithographic work is even exceptionally fine. The purely dental part of the Transactions consists of 385 pp. in Vol. V., and many of the contributions are extremely interesting.

As it was found impossible to submit proofs for correction to authors, scattered as they were throughout the world, the original manuscript was followed as faithfully as possible by the printers. Considering this, the Transactions are wonderfully free from typographical errors, and altogether reflect great credit on the Publication Committee and the Editor, John B. Hamilton, M.D.

As the paper covers will soon come to grief, the following information I have received from Messrs. Fell & Co. will be of interest to others besides myself. They can supply a limited number of covers for binding in half-morocco, gilt titles and seal of the Congress for the five volumes for \$5 (and expenses, if there should be any, in sending abroad). As these covers can be put on by any ordinary bookbinder, the result will be more effective and less expensive than having them specially bound.

I am obtaining such covers for some friends and will be glad to do

so for any member of the Association applying before the end of this month, as the trouble of remittances and freight will be thereby simplified.

I also understand that a limited number of these handsome volumes may be obtained for \$15.

I am, Dear Sir,

Yours very truly,

GEO. CUNNINGHAM.

2, *King's Parade, Cambridge*, 11 Dec., 1888.

The Successful Treatment of Pulpless Teeth.

TO THE EDITOR OF THE "JOURNAL OF THE BRITISH DENTAL ASSOCIATION."

DEAR SIR,—In an address to the Southern Counties Branch of the British Dental Association published in your last issue, Mr. Dennant has made kindly mention of some suggestions of mine on "The Successful Treatment of Pulpless Teeth." To those who care to try the formula given and the treatment adopted, it may be useful to state that the most important results have been obtained in the saving of very many chronic dead teeth, in which the nerves have lost their vitality before coming under notice, and where one generally finds the pulp chambers and nerve canals in an unhealthy, if not septic condition. With few exceptions it is possible to fill such teeth at once, and seldom have failures. The same preparation of iodoform has proved very useful in "capping" nerves after accidental exposure. I generally cover with a disc of metal to avoid pressure, and have often been struck with the fact that where the nerve has not remained alive, the iodoform paste seems to have retarded decomposition and prevented putrefaction.

Faithfully yours,

Railway Approach,

London Bridge, S.E.

R. DENISON PEDLEY.

APPOINTMENTS.

PERCY A. LINNELL, L.D.S.Eng., has been appointed House Surgeon to the Victoria Dental Hospital, Manchester, *vice* C. H. Smale, resigned.

T. G. READ, L.D.S.Eng., D.M.D.Harv., has been appointed Assistant Dental Surgeon to the National Dental Hospital and College.

HENRY G. READ, M.R.C.S., L.R.C.P.Lond., L.S.A., L.D.S.Eng., has been appointed Dental Surgeon to the National Dental Hospital, *vice* Thomas Gaddes, resigned.

NOTE.—ANONYMOUS letters directed to the Secretary of the Association cannot receive attention.

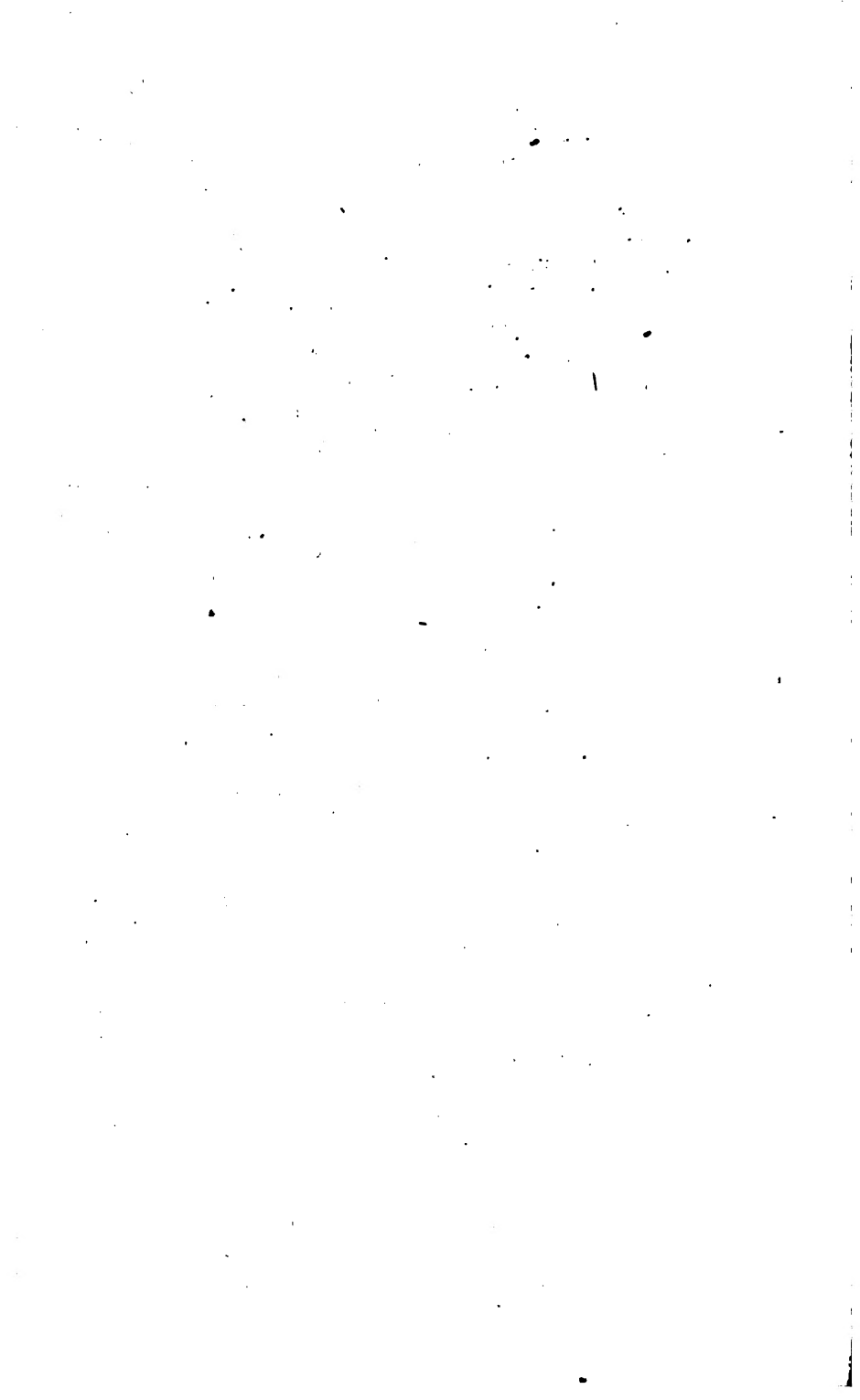
P.O. Orders must be accompanied by Letters of Advice.

Communications intended for the Editor should be addressed to him at 11, Bedford Square, W.C.

Subscriptions to the Treasurer, 40, Leicester Square.

All Contributions intended for publication in the Journal must be written on one side of the paper only. The latest date for receiving contributions for the current number is the 5th of the month.





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